

PROCEEDINGS

FIFTEENTH ANNUAL CONVENTION OF THE NATIONAL ASSO- CIATION OF BUILDING OWNERS AND MANAGERS



**BEDFORD SPRINGS, PA.
JUNE 19 TO 24, 1922**

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Chamber of Commerce Bldg
Los Angeles

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THE PROCEEDINGS
OF THE FIFTEENTH
ANNUAL CONVENTION
OF THE NATIONAL ASSO-
CIATION OF BUILDING
OWNERS *and* MANAGERS

HELD AT
BEDFORD SPRINGS HOTEL
BEDFORD SPRINGS, PA.
JUNE 19 to 24
1922

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Chicago

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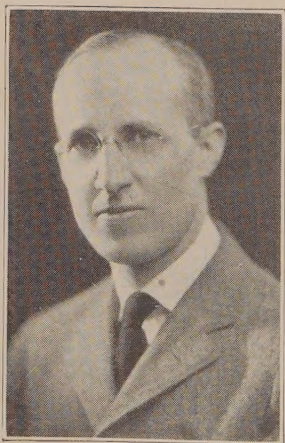
Officers and Directors 1922-1923



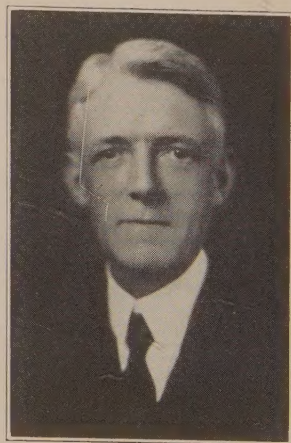
EARLE SHULTZ
President
Edison Building
Chicago



LEE THOMPSON SMITH
First Vice President
55 Liberty St.
New York



PAUL ROBERTSON
Second Vice President
Hume Mansur Building
Indianapolis

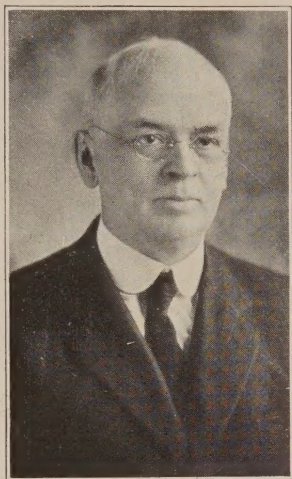


ISSAC T. COOK
Third Vice President
Arcade Building
St. Louis

Officers and Directors 1922-1923



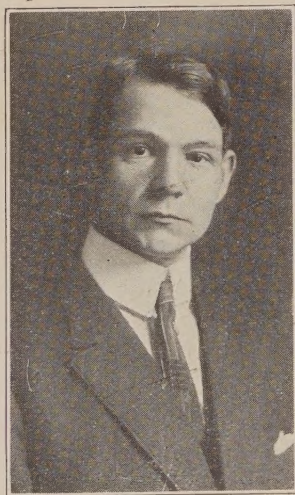
WILLIAM M. MACLACHLAN
Treasurer
Penobscot Building
Detroit



HOWARD G. LOOMIS
Corporate Secretary
Omaha National Bank Bldg.
Omaha

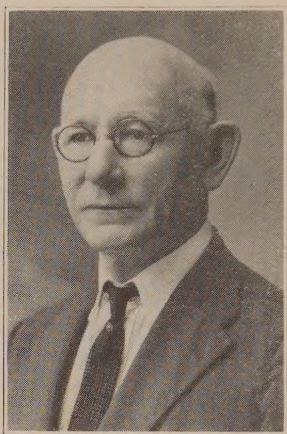


LEWIS B. ERMELING
Executive Secretary
Edison Building
Chicago



WALDO A. AVERY
Director
Majestic Building
Detroit

Directors 1922-1923



E. M. HORINE
Director
Grand Building
Atlanta



JOHN C. O'CALLAGHAN
Director
929 Chestnut Street
Philadelphia

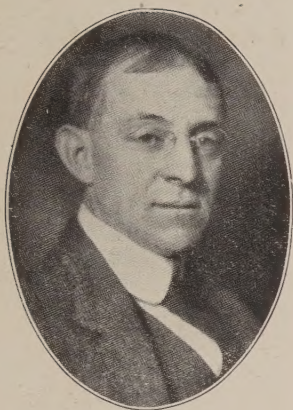


E. EVERETT THORPE
Director
175 West 72nd Street
New York

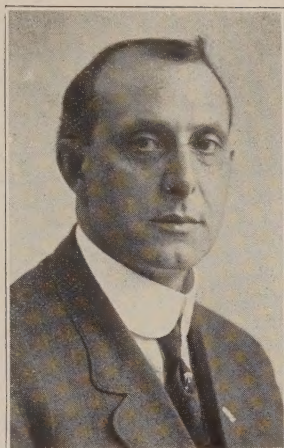


DEAN VINCENT
Director
Northwestern Bank Building
Portland

Past Presidents



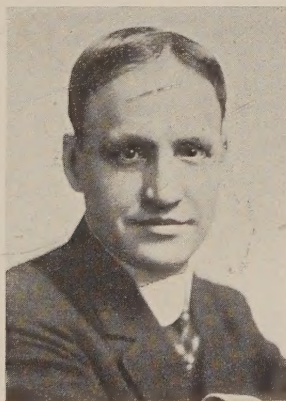
JOHN C. KNIGHT
President, 1910-1912
1 Madison Avenue
New York



CHARLES E. HORTON
President, 1912-1913
New York Building
Seattle

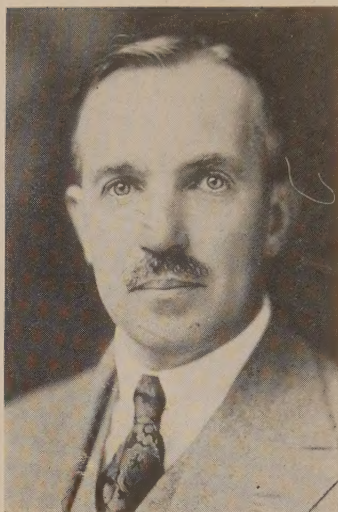


CHARLES E. DOTY
President, 1915-1917
Hippodrome Building
Cleveland



WILLIAM MARSHALL ELLIS
President, 1917-1919
Old Colony Building
Chicago

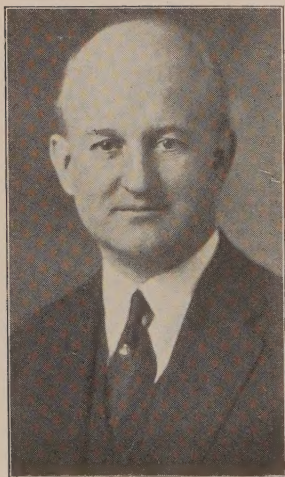
Past Presidents



FRED L. SWETLAND
President, 1919-1920
Swetland Building
Cleveland



GORDON STRONG
President, 1920-1921
The Republic Building
Chicago



CLARENCE T. COLEY
President, 1921-1922
Equitable Building
New York

Deceased

Edwin H. Doyle, Detroit
President 1908-1910

J. E. Randell, Chicago
President 1913-1915

Affiliated Local Associations

NEW YORK

E. E. Thorpe, 172 W. 72nd St.....President
C. F. Merritt, 220 Broadway.....Secretary

ATLANTA

E. M. Horine, Grand Building.....President
Fred Shaefer, Atlanta Tr. Co. Building.....Secretary

DAYTON

C. W. Brooks, Mutual Home Building.....President
D. M. Rowe, American Building.....Secretary

DULUTH

H. L. George, Phoenix Building.....President
O. G. Lachmund, Lonsdale Building.....Secretary

SEATTLE

Roy J. Kinnear, White Building.....President
J. T. Curran, New York Building.....Secretary

BIRMINGHAM

H. R. Kampen, Jefferson Co. Bk.....President
R. J. Adams, Empire Building.....Secretary

PORTLAND

C. S. Holbrook, Wilcox Building.....President
J. J. Sayer, Northwestern Bk. Building.....Secretary

CLEVELAND

W. I. Lewis, Williamson Building.....President
F. B. Bicknell, The Arcade.....Secretary

CINCINNATI

M. W. McIntyre, Union Central Building.....President
L. V. DuBois, Union Central Building.....Secretary

BALTIMORE

A. E. McBride, Munsey Building.....President
H. G. Bishop, The Lexington Building.....Secretary

CHICAGO

W. M. Ellis, Old Colony Building.....President
T. E. Bainbridge, Marquette Building.....Secretary

MINNEAPOLIS

A. E. Zonne, First National Soo-Line Building.....President
E. L. Bruce, Plymouth Building.....Secretary

ST. LOUIS

C. E. Ricketts, Railway Exchange Building.....President
Chas. Hamilton, National Bank of Commerce.....Secretary

SAN FRANCISCO

R. T. Smith, Crocker Building.....President
E. M. Applegarth, Foxcroft Building.....Secretary

OMAHA

W. J. Palmer, Keeline Bldg.....President
H. W. Graham, Peters Trust Bldg.....Secretary

DENVER

Louis W. Mack, Mack Block.....President
C. A. Hackstaff, 607 Seventeenth Street.....Secretary

SALT LAKE CITY

J. E. McGinty, Kearns Building.....President
A. Roy Heath, Clift Building.....Secretary

JACKSONVILLE

R. P. Walker, Professional Building.....President
E. C. Desch, Graham Building.....Secretary

DETROIT

W. M. MacLachlan, Penobscot Building.....President
Carl Wells, Chamber of Commerce Building.....Secretary

LOS ANGELES

Jas. R. Martin, Frick Martin Co.....President
Benj. F. McLouth, 639 S. Spring Street.....Secretary

ST. PAUL

A. C. Maxfield, Mercantile National Bank Building.....President
W. F. Davidson, Pioneer Building.....Secretary

BUFFALO

E. M. Hill, Ellicott Square Building.....President
H. J. Gould, Prudential Building.....Secretary

LOUISVILLE

John Kesselring, Louisville Trust Co.....President
Maurice Dunn, Realty Building.....Secretary

OAKLAND

C. P. Murdock, Realty Syndicate.....President
I. C. Allen, Syndicate Building.....Secretary

INDIANAPOLIS

Paul Robertson, Hume Mansur Building.....President
F. C. Tucker, Peoples Bank Building.....Secretary

MEMPHIS

Geo. Randolph, Randolph Building.....President
S. J. Latta, Randolph Building.....Secretary

NEW ORLEANS

M. L. Bouden, Whitney Central Bank Building.....President
T. H. Lynch, Maison Blanche Building.....Secretary

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Bedford Springs Convention Registration

REGISTERED DELEGATES

ATLANTA, GA. (6)

John F. Clegg.....Candler Building
Thos. Connolly.....Connolly Building
E. M. Horine.....Grand Building
S. L. Hurt.....Hurt Building
W. A. Jones.....Atlanta Trust Co. Building
Fred ShaeferAtlanta Trust Co. Building

BALTIMORE (1)

Howard G. Bishop....Lexington Building

BOSTON (6)

Wm. B. Baker.....18 Tremont St.
W. H. Ballard.....45 Milk St.
B. E. Bennett.....82 Devonshire St.
Chas. J. Bliss.....10 State St.
F. A. Ewart.....82 Devonshire St.
J. G. Morgan.....67 Milk St.

BUFFALO (1)

H. J. Gould.....Prudential Building

CANTON (1)

Neil D. Schworm.....1st Nat'l Bank Building

CEDAR RAPIDS (1)

Fred M. Higley.....Higley Building

CHICAGO (7)

Clara C. Cramer.....City Hall Square Building
L. B. Ermeling.....Edison Building
B. M. Marcon.....Heyworth Building
Earle Shultz.....Edison Building
Gordon Strong.....Republic Building
Leo J. Sheridan.....Straus Building
Wm. S. Thurber.....Aldis & Co.

CLEVELAND (17)

Frank B. Arnold.....Citizens Building
F. B. Bicknell.....Arcade Building
John Coulton.....W. S. Tyler Co.
Charles E. Doty.....Hippodrome Building
C. Floyd Green.....Ohio Motor Vehicle Co.
M. S. Halliday.....Citizens Building
O. L. Hays.....Cuyahoga Building
James L. Jackson.....Engineers Building
W. I. Lewis.....Williamson Building
John Maier.....Williamson Building
L. J. Pauley.....Guardian Building
Carlton Shultz.....Union Building
S. W. Scofield.....Scofield Building
H. A. Stahl.....Hickox Building
A. H. Sweetland.....Sweetland Building
F. L. Sweetland.....Sweetland Building
T. M. Sweetland.....Sweetland Building

CINCINNATI (3)

L. V. DuBois.....Union Central Building
John H. Hall.....St. Paul Building
M. W. McIntyre.....Union Central Building

DAVENPORT (1)

W. E. Whittlesey.....Putnam Building

DAYTON (5)

Charles W. Brooks....Mutual Home Building
Charles Geiger.....Dayton Savings & Trust Co. Building
A. M. J. Gibbons.....Gibbons Arcade
H. C. Lange.....Fidelity-Medical Building
D. M. Rowe.....Conover Building

DENVER (3)

Cyrus A. Hackstaff....607 Seventeenth St.
O. Ben Haley.....Cooper Building
A. D. Wilson.....Foster Building

DES MOINES (1)

Frank H. Warner.....Hippee Building

DETROIT (5)

Waldo A. Avery.....Majestic Building
W. D. Buick.....Kresge Building
Albert Kern.....Dime Bank & Ford Buildings
W. M. MacLachlan...Penobscot Building
N. T. Viger.....David Whitney Building

INDIANAPOLIS (4)

Geo. W. Klein.....Merchants Bank Building
Paul Robertson.....Hume Mansur Building
C. F. Schmidt.....Century Building
V. A. Swain.....Lemcke Annex & Lemcke Building

KNOXVILLE (1)

T. A. Falconnier.....Empire Building

LITTLE ROCK (2)

Warren Baldwin.....Southern Trust Building
Corbin M. Duncan....Boyle Building

LOS ANGELES (1)

Louis T. Clark.....Wright & Callender Building

LOUISVILLE (1)

John Kesselring.....Louisville Trust Co.

MEMPHIS (3)

S. J. Latta.....Randolph Building
George Randolph.....Randolph Building
S. D. Tucker.....Bank of Commerce Building

MINNEAPOLIS (4)

E. S. Hughes.....Chamber of Commerce Building
E. J. Krafft.....Lumber Exchange Building
John A. Olson.....First Nat. Soo Line Building
Ell Torrance, Jr.....Andrus Building

NEW ORLEANS (3)

T. H. Lynch.....Maison Blanche Building
W. McCay.....Canal Com'l Tr. & Sav. Bank Building
W. G. Murray.....Hibernia Bank Building

NEW YORK (28)

B. H. Belknap.....14 Wall St.
Corwin Black.....65 Broadway
Chas. Burkelman.....40 Sullivan St.
Hal D. Chapman.....505 5th Avenue
Wm. H. Class.....30 Nassau St.
C. T. Coley.....120 Broadway
Wm. T. Cornu.....152 West 72nd St.
D. M. Cruikshank.....141 Broadway
J. Clydesdale Cushman, 50 E. 42nd St.
Oscar D. Dike.....220 W. 42nd St.
H. L. Eckersen.....46 Cedar St.
H. A. Fisher.....690 Sixth Avenue
C. E. Forster.....342 Madison Avenue
A. H. Fromm.....60 Wall St.
Peter Grimm.....522 Fifth Avenue
Wm. G. Hamilton...Federal Reserve Bank
Arthur J. Hopper....17 State St.
Henry A. McCarthy...5th Avenue Building
Chas. F. Merritt.....220 Broadway
Edward C. Muth.....350 Madison Avenue
Chas. C. Nicholls, Jr..Shulte Cigar Company
Douglas G. Scott....111 Broadway
Lee T. Smith.....55 Liberty St.
J. J. Sproul.....260 Ellsworth Ave.
E. Everett Thorpe....175 West 72nd St.
Martin J. Ungrich....447 West 144th St.
E. K. Van Winkle....152 West 72nd St.
O. A. Woodruff.....1 Madison Avenue

NORFOLK (2)

E. A. Eggerstedt.....830 Royster Building
George H. Taylor.....166 Brooke Ave.

OMAHA (4)

Alfred C. Kennedy....Peters Trust Building
H. G. Loomis.....Omaha Nat. Bank Building
Harriet R. Nelson....Brown Building
W. J. Palmer.....Keeline Building

PEORIA (1)

Frederick B. Bourland. Central Nat. Bank Building

PHILADELPHIA (10)

W. H. Ball.....Land Title Building
Robert J. Dothard....50 Broad St. Sta.
Thos. F. Egan, Jr....929 Chestnut St.
Edwin E. Hahn.....Bell Telephone Co.
Andrew Johnstone....Atlantic Building
F. X. Monville.....Philadelphia Electric Co.
J. C. O'Callaghan....929 Chestnut St.

Adrien W. Vollmer...Transportation Building
Harry F. Winters, Jr..16th & Sansome St.
Edwin S. Way.....Liberty Building

PITTSBURGH (8)

Jacob H. Aronson....Union Arcade Building
James W. Bamford....Westinghouse Building
R. E. Barber.....Oliver Building
A. Callender.....Union Arcade Building
Samuel Forse.....Standard Life Building
Chas. C. McKallip....336 Fourth Ave.
W. W. Miller.....Standard Life Building
Wm. C. Zeigler.....Fulton & Bessemer Buildings

PORTLAND (4)

Chas. S. Holbrook....Wilcox Building
W. C. North.....Morgan Building
James J. Sayer.....Northwestern Bank Building
Dean Vincent.....Northwestern Bank Building

RICHMOND (1)

William Parker.....Mutual Assurance Society

SALT LAKE CITY (3)

A. Roy Heath.....Clift Building
J. E. McGinty.....Kearns Building
R. C. Treanor.....Felt Building

ST. PAUL (1)

A. V. Fabian.....Pacific Railway Co.

SAN FRANCISCO (6)

E. M. Applegarth....Foxcroft Building
Eugene N. Fritz.....116 Frederick St.
W. D. Henderson....Monadnock Building
Vincent T. Mead.....151 Sutter St.
Rae T. Smith.....Crocker Building
J. B. Williams.....350 California St.

ST. LOUIS (4)

Isaac T. Cook.....Arcade Building
Jas. F. Cook.....Chemical Building
C. M. Turley.....Arcade Building
Guy H. Wright.....Third Nat'l Bank Building

SEATTLE (5)

Chas. F. Clise.....Securities Building
J. T. Curran.....New York Building
Roy Kinnear.....White Building
Andrew Steers.....Metropolitan Building Co.
David Whitcomb.....Arcade Building

TOLEDO (1)

Claude A. Campbell...Ohio Savings Bank & Trust Co.

TORONTO (2)

William Clark Dawson.Royal Bank Building
J. A. McCallister....Lumsden Building

WILMINGTON (1)

Wm. Frederick.....DuPont Building

WINSTON-SALEM (1)

Moir A. Hodgin.....Wachovia Bank & Trust Co. Building

YOUNGSTOWN (2)

Fred W. Green.....Home Savings & Loan Building

John Robertson.....Mahoning Nat'l Bank Building

TOTAL DELEGATES—161

CONVENTION SPEAKERS

J. Adam Bede.....Duluth
John A. Dickinson.....Washington
Robert B. Ely.....Bloomfield
J. T. Haviland.....Philadelphia
Samuel G. Hibben.....Bloomfield
A. E. Horn.....Long Island City
Bassett Jones.....New York
James S. Kemper.....Chicago
David Lindquist.....New York
Wm. C. McTarnahan.....Boston
C. B. Nash.....Pittsburgh
Stephen F. Voorhees.....New York
A. L. Powell.....Harrison
Walter Stabler.....New York
Frank N. Speller.....Pittsburgh
C. C. Sunderland.....Trenton

CONVENTION GUESTS

Mrs. W. H. Ballard.....Boston
Mrs. J. G. Morgan.....Boston
Mrs. Guy H. Wright.....St. Louis
Mrs. C. F. Schmidt.....Indianapolis
Mrs. V. A. Swain.....Indianapolis
Mrs. John H. Hall.....Cincinnati
Mrs. H. A. Stahl.....Cleveland
Mrs. John Maier.....Cleveland
Mrs. Harry F. Winters, Jr.....Philadelphia
Mrs. F. X. Monville.....Philadelphia
Mrs. Jos. F. Simpson.....Philadelphia
C. F. Vondem Bussche.....Washington
Mrs. E. Everett Thorpe.....New York
Mrs. Oscar D. Dike.....New York

Mrs. Chas. E. Doty.....	Cleveland
Mrs. W. I. Lewis.....	Cleveland
Mrs. J. A. McCallister.....	Toronto
Mrs. Rae T. Smith.....	San Francisco
Mrs. J. B. Williams.....	San Francisco
Mrs. Edward M. Applegarth.....	San Francisco
Mrs. Gordon Strong.....	Chicago
Mrs. W. C. Zeigler.....	Pittsburgh
Mrs. Chas. F. Merritt.....	New York
Mrs. Wm. H. Class.....	New York
Mrs. Martin J. Ungrich.....	New York
G. E. Henry.....	Chicago
Mrs. W. E. Whittlesey.....	Davenport
Mrs. Ell Torrance.....	Minneapolis
Alice C. Gilchrist.....	Omaha
Mrs. William A. Hamilton.....	New York
Mrs. Douglas G. Scott.....	New York
Mrs. Hal D. Chapman.....	New York
Mrs. M. S. Halliday.....	Cleveland
Mrs. E. M. Horine.....	Atlanta
Miss Edna Horine.....	Atlanta
Mrs. Frank B. Arnold.....	Cleveland
James Arnold.....	Cleveland
Mrs. S. L. Hurt.....	Atlanta
Mrs. Earle Shultz.....	Chicago
Mrs. John S. Meck.....	Chicago
Mrs. Fred W. Green.....	Youngstown
Mrs. Clarence T. Coley.....	New York
Mrs. Charlie Lawrence.....	New York
Mrs. A. M. J. Gibbons.....	Dayton
Mrs. D. M. Rowe.....	Dayton
Miss Dorothy Rowe.....	Dayton
Stanley H. Trezevant.....	Memphis
Mrs. H. L. Eckerson.....	New York
Miss Eckerson.....	New York
Mrs. Chas. Burkleman.....	New York
Mrs. W. D. Henderson.....	San Francisco
Mrs. Mabel Leigh.....	Pittsburgh
Mrs. J. J. Sproul.....	New York
Mrs. J. Clydesdale Cushman.....	New York
Mrs. Chas. Geiger.....	Dayton
Mrs. O. Ben Haley.....	Denver
Mrs. A. D. Wilson.....	Denver
Mrs. O. L. Hays.....	Cleveland
Martin Burkleman.....	New York
Mrs. J. F. Guthrie.....	San Francisco
Harry D. Parker.....	Richmond
Mrs. Kirk Greer.....	Chicago
Mrs. Arthur J. Hopper.....	New York
Mrs. John Kesselring.....	Louisville

Mrs. Moir A. Hodgins.....	Winston-Salem
Mrs. T. A. Falconnier.....	Knoxville
Mrs. A. V. Fabian.....	St. Paul
Mrs. John Coulton.....	Cleveland
Mrs. Isaac T. Cook.....	St. Louis
Miss Virginia Sherwood.....	St. Louis
Brown A. Sherwood.....	St. Louis
Mrs. W. C. Dawson.....	Toronto
Miss M. Dawson.....	Toronto
Miss K. Dawson.....	Toronto
Mrs. Jas. F. Cook.....	St. Louis
Mrs. Wm. Frederick.....	Wilmington
J. C. Langtry.....	Chicago
Mrs. C. M. Turley.....	St. Louis
Mrs. Leah Aronson.....	Pittsburgh
A. Levy.....	Pittsburgh
E. Levy.....	Pittsburgh
Mrs. C. C. Nicholls, Jr.....	New York City
Mrs. C. Floyd Green.....	Cleveland
Chas. H. Vaughn.....	New York
Henry Taegle.....	Toledo
Mrs. J. S. Kemper.....	Chicago
W. L. Schaeffer.....	Pittsburgh

TOTAL REGISTRATION—264

Proceedings
of the
Fifteenth Annual Convention
of the
National Association of Building Owners and
Managers

Bedford Springs, Pennsylvania
June 19, 20, 21, 22, 23, 24, 1922

MONDAY AFTERNOON SESSION
JUNE 19, 1922

The Fifteenth Annual Convention of the National Association of Building Owners and Managers met in the convention hall at the Bedford Springs Hotel, Bedford, Pa., on Monday afternoon, June 19, and was called to order at three o'clock by the President, Mr. Clarence T. Coley, of New York City.

THE PRESIDENT: I will ask that you rise for a moment in prayer.

INVOCATION

We pray Thy guiding hand to lead us aright in our deliberations. Watch over us, and especially over the loved ones left at home. Take us back when we have finished here, more able to serve Thee. Amen.

THE PRESIDENT: Mr. Frank X. Monville needs no introduction. Before we proceed to the regular routine of business I wish to give him the privilege of the floor. Mr. Monville. (Applause, audience rising. Cries of "What's the matter with Monville," and three cheers.)

FRANK X. MONVILLE, Philadelphia: When it was decided at the March meeting of the Directors in Chicago that we were going to hold our convention at the Bedford Springs Hotel, there were a lot of misgivings. President Coley and I were the only ones who had been here previously. It is a mighty fine thing, after worrying for two or three months, to see so many here this afternoon. I knew very well what you could expect, but I did not know whether everybody's views would correspond with mine. I happen to love Bedford Springs and everything around

it. If any of the delegates and their guests have been a bit inconvenienced, just bear gently and we will repay you for any inconvenience which you have had.

Mr. Sweeney has asked me to convey to you his hearty welcome to the Bedford Springs Hotel. He will do everything in his power to make your stay a memorable one. He has placed at the disposal of the ladies his private car and chauffeur to take you back and forth to Bedford for shopping, etc. (Applause.)

(Mr. Monville then made some announcements as to the entertainment features that had been provided.)

President's Address

Clarence T. Coley, New York City

At the top of the second column of page 18 of the program is the only thing in which Coley does not enjoy participating. It is dignified by the name of an "Address." That can't be done. I never have delivered an address, and cannot start now. But I can talk a little, and probably suggest a few things for our future work in the Association.

I have written the opening paragraphs. (Reads.)
Gentlemen Owners and Managers, Lady Owners and Managers,
Friends, and Guests in Convention Here Assembled—
Greetings!

The life of the National Association of Building Owners and Managers started with a convention in Chicago fourteen years ago. This is our Fifteenth Convention. We progress through conventions and each one has grown more instructive, more intensive and longer than its predecessors. The program for this week is longer, and by the end of the week you can declare as to its intensiveness and instructiveness.

Last year in Portland we reached the zenith in perfect arrangements. This year it is different for we are paddling our own canoe. Generally the real pleasures of life are derived from the things we do ourselves.

Bedford Springs! Do you know who discovered this place? Frank Monville. Two years ago, during the convention at Minneapolis, Frank let the cat out of the bag—when he, Lee and Bick were making their get-a-way with two traveling bags and a cane. I quote Mr. Monville:

"I personally would rather come to a convention and work than just sit down." (He will be sorry he ever said that before this week is over.) He then continues with emotion: "I want you to believe me when I say it. This comes a little bit deeper than from the bottom of my heart." (He had to go Lee Smith and Bicknell one better, because they had said a lot about the lower end of their hearts in their speeches.) "There is only one regret I have. I want everybody to know it is a bona fide regret. I must leave tonight for *Bedford Springs*."

That's the very first time any of us ever heard of this place. Frank came first, sampled its waters, and immediately laid plans to bring us here. So, Frank Monville is the "find" for this convention. He is just a natural-born convention manager. When we were returning from Portland, Frank said to me, "Go to New York; get some clean duds and come back to Bedford Springs with me next week." I did so. I went to our Directors meeting with Monville, and that's why you are here today.

We are glad to welcome the ladies to our conventions. I want to thank the ladies for coming and lending their charm to this convention. I am sure your presence will maintain enthusiasm among our membership to the very last.

I want to thank the Directors particularly, for the co-operation they have given your President during the past year. We have held two meetings, both in Chicago which, geographically, is about central, so far as the membership of our Board of Directors is concerned. We had 100 per cent attendance at each meeting, and that is a remarkable record. Take the case of Dean Vincent, from Portland. He has spent three months of this year in our behalf traveling to and from his home to the various Association meetings. (Applause.) Mr. Horine, from Atlanta, is another member who has traveled a great distance—in fact, great sacrifice of time and of personal effort has been made for our Association by each member of the Board of Directors. The convention made a very able selection when they elected those men, and working with them has been a great pleasure.

The convention program as laid out really has four classifications. First is the scientific program of set papers by specialists on subjects in which we are intensely interested in our business. Second, is the educational program by the manufacturers of articles which most of us use. We probably know but little about their manufacture. Third, is the entertainment, as outlined by Mr. Monville. Fourth, is the business program of the convention.

These have been welded together so that we will not be tired by too much theoretical consideration, too much business, or too much entertainment, but it is going to make a good table d' hôte convention. We want your co-operation so that we may leave on Sunday with all work completed. This program has a little heart and soul to me. It is not just a conglomeration put together.

We are conducting a dignified convention. We are not being beset by commercial fiends to come and look at their booths and exhibits. They are not taking us away on junketing parties. We are in this hotel surrounded by our friends and associates, all of whom we can call "Brother," and we can call a spade a spade.

This printed convention program was made up by certain advertisers in order to help defray the convention expenses. The

various men and companies who have advertised here will receive their reward financially.

I want to emphasize the work done during the year by Earle Shultz. He has contributed, during my administration, a great deal to the work of this Association by the masterful presentation of two great papers which have been sent to all the members. (Applause.)

I cannot speak too strongly about the contributions made by Colonel Gordon Strong, and the great interest he has taken in this Association. When his term of presidency expired and he handed the gavel to me with a smile—because he knew what he was putting over (laughter)—he did not stop; but he has kept up his interest as unceasingly for our great good as though he stood in this place. (Applause.)

The scheme of National Association work today is a little different than it used to be. Today the tail is wagging the dog. We started fourteen years ago as a National Association with a convention. Today our endeavor is to form more local associations in the various great cities. The distance which separates us nationally makes it almost impossible to function constantly throughout the year. Then we formed local associations, and those boys got together weekly and called one another Jack and Tom, and stimulated confidence between neighbors engaged in the same line of business.

I cannot emphasize too strongly the great worth of local associations. It is like a graduate coming home from college with her diploma. Her father says, "Mabel, what do you know?" It is hard for her to tell what she learned in four years. It is just as hard to tell you what we get out of the local or national association work, but we are getting it, all the same.

You men in smaller cities with only a few managers—form an association and let the seed grow. Finally, by the help of the National and its office in Chicago, we will help you to organize and the first thing you know you have an association which will develop into a constructive force. It can't help it.

We have twenty-seven affiliated local associations today. The National Association is only the tying-in of those twenty-seven associations. The National is the fostering power that is going to hold those twenty-seven associations together. One association may die for lack of enthusiasm. We will stimulate it by giving new ideas to work on, and keep those associations up. The committees which are now functioning throughout the country for the National Association are the committees of the local associations. The chairman of every local association committee is a member of the corresponding National Committee. In that way, I feel within a short time our National Association will be very strong. Its force will be so great you cannot stop it any more than you can stop a great movement when it is headed in one

direction. Dayton won't die. New York won't die. Seattle won't die. The National must be a moving success.

You have all heard about Moses. It seems Moses liked to run everything himself. He was a one-man association for quite a long time. Finally one of the men went to him and said: "Moses, you're all wrong. You are killing yourself and the people, too. You can't get away with this thing alone. Listen to me! First draw up a set of rules and regulations. Then pick out men of ability and make them rulers of thousands, rulers of hundreds, rulers of fifties, and rulers of tens. Let these men take care of the little things and you settle the big questions."

That's the National Association organization today. You have a President who looks after the Board of Directors. It looks after the chairmen of the committees in the local association. The chairmen of the committees in the local association look after their respective committeemen, and those respective committees look after the whole association in the cities. Organization: it is the only thing. You can't beat it. The organization of the yellow jacket's nest Colonel Strong told us about last year is vivid in my mind. Organization is what won out.

The most interesting phenomenon in the world is that of mastery—the most curious combination of two abilities: one to know how to do things and the other to make people believe he knows how to do things. We can all go to college and conventions and learn how to do things, but the successful fellows are those who can convince other people that they know how to do things. That is mastery. We are not masters if we have only the one ability and not the other.

Associations such as ours would be unnecessary if some magical transformation could be produced in men's ways of looking at themselves, and no inconsiderable part of the evils which now afflict society would vanish or remedy themselves automatically. There would, for instance, be no likelihood of another great war. The whole problem of labor and capital would be transformed. National arrogance, race animosity, political corruption and inefficiency would be reduced. As an old proverb has it: "Men are tormented by the opinions they have of things, rather than by the things themselves."

We need improvement through association with the best so that we may profit quickly in our short span of life. All our civilization is but a thin skin of culture, overlying thousands of years of ignorance, and perhaps millions of years of incoherent animalism. A lot of the imperfect traits cling to us. In forty years of active life we cannot succeed alone. We must associate with our fellows and profit by their experiences. Consequently, I am for association work, and I hope you are, too, and will continue to be. (Applause.)

THE PRESIDENT: It is now my duty and privilege to appoint certain committees to function during the convention.

AUDITING COMMITTEE

Charles Holbrook, Portland, Chairman.
William H. Ballard, Boston.
Ernest M. Hill, Buffalo.
Joseph C. Grieb, Milwaukee.

COMMITTEE FOR ASSISTING SPEAKERS

H. G. Loomis, Omaha, Chairman.
Charles Merritt, New York.
Capt. M. W. McIntyre, Cincinnati.

RESOLUTIONS COMMITTEE

David Whitcomb, Seattle, Chairman.
William Candler, Atlanta.
W. C. North, Portland.
William H. Class, New York.
J. E. McGinty, Salt Lake City.
H. G. Bishop, Baltimore.
Alfred C. Kennedy, Omaha.

NOMINATING COMMITTEE

Dean Vincent, Portland, Chairman.
F. L. Swetland, Cleveland.
Roy Kinnear, Seattle.
Col. Gordon Strong, Chicago.
Corwin Black, New York City.
Paul Robertson, Indianapolis.
Harry A. Austin, Detroit.

1923 CONVENTION COMMITTEE

Lee T. Smith, New York City, Chairman.
Earle Schultz, Chicago.
John Lewis, Birmingham.
Vincent F. Mead, San Francisco.
A. D. Wilson, Denver.

SERGEANTS-AT-ARMS

William A. Jones, Atlanta.
A. Roy Heath, Salt Lake City.

THE PRESIDENT: We will now have the Treasurer's report.
(Applause.)

Report of the Treasurer

Lee Thompson Smith, New York City

Every year when the Treasurer reads a report, no one pays any attention to it. I thought this year I would try something new, so I had the reports typewritten and photographed. I think you can see them from the back part of the hall, but I can scarcely see them here. (Laughter.)

NATIONAL ASSOCIATION OF BUILDING OWNERS AND MANAGERS

Budget of Expenses—June 1st, 1922, to May 31st, 1923

EXECUTIVE OFFICE

	Monthly	To 12/31/22	To 5/31/23
A-1. Fixtures	\$ 10.00	\$ 70.00	\$ 120.00
A-2. Salaries—Secretary, Assistant, Extra—clerical, addressograph, etc..	608.33	4,258.31	7,299.96
A-3. Commissions			
A-4-5. Rent, Service and Light.....	12.50	87.50	150.00
A-6. Telephone and Telegraph.....	12.00	84.00	144.00
A-7. Stationery and Supplies.....	35.00	245.00	420.00
A-8. Stamps	50.00	350.00	600.00
A-9. Bulletin and Mailing.....	160.00	1,120.00	1,920.00
A-10. Transportation	10.00	70.00	120.00
A-11. Entertainment	5.00	35.00	60.00
A-12. Dues	2.00	14.00	24.00
A-13. Magazines	3.00	21.00	36.00
A-14. Books	2.00	14.00	24.00
A-15. Miscellaneous	10.00	70.00	120.00
	\$919.83	\$6,438.81	\$11,037.96

COMMITTEES AND SPECIAL-EXPENSE BUDGET

B. Corporate Secretary	\$ 100.00	\$ 200.00
C. Treasurer's Office.—Bookkeeping, \$300; General Expenses, \$200	280.00	500.00
D. Annual Convention		
E. Directors' Meeting	1,000.00	2,000.00
F. Finance		
G. Promotion of Local Associations.....	200.00	400.00
H. Ethics (Printing Code).....	100.00	100.00
I. Renting	50.00	100.00
J. Legislation	25.00	50.00
K. Taxation (Obsolescence)	75.00	100.00
L. Insurance (Survey)	25.00	50.00
M. Employment	25.00	50.00
N. Purchasing	10.00	20.00
O. Research (Printing Report).....	100.00	150.00
P. Accounting and Exchange (1921 Report).....	500.00	700.00
Q. President's Office	100.00	200.00
R. Membership Committee (Campaign).....	300.00	600.00
S. Apartment House		
	\$2,891.32	\$5,220.00

TOTAL EXPENSES FROM JUNE 1st, 1922, TO DECEMBER 31st, 1922	\$ 9,330.13
TOTAL EXPENSES FROM JUNE 1st, 1922, TO MAY 31st, 1923	16,257.96

TREASURER'S OFFICE June 1st, 1921, to May 31st, 1922

BALANCE

June 1st, 1921—Cash, Columbia Trust Co., New York.	\$ 4,033.81	
June 1st, 1921—Cash, Union Square Savings Bank, New York	1,030.20	
June 1st, 1921—Cash, Corporate Secretary's Fund, Omaha	300.00	\$ 5,364.01

RECEIPTS

Active Members' Dues, 1918.....	\$ 10.00	
Active Members' Dues, 1921.....	1,420.00	
Active Members' Dues, 1922.....	4,270.00	
Affiliated Associations' Dues, 1921.....	500.00	
Affiliated Associations' Dues, 1922.....	9,580.00	15,780.00
Bank Interest, Columbia Trust Company, New York.	\$ 56.07	
Bank Interest, Union Square Sav. Bank, New York..	20.60	
Voluntary Assessments	3,752.85	
Contributions, Duluth Association.....	160.00	
Active Membership, Applications Pending.....	380.00	
Credits due. Affiliated Associations, Los Angeles, \$5; New Orleans, \$10.....	15.00	
Miscellaneous Sale—Executive Office.....	23.29	
Refund—Executive Office	2.50	
Sale—Copy of Proceedings, Executive Office.....	1.00	
Sale—Accounting and Exchange Reports, Executive Office	7.00	
Exchange on Check.....	.10	4,417.41
		<u>\$25,561.42</u>

DISBURSEMENTS

A—Executive Office	\$12,520.59	
A—Furniture and Fixtures.....	193.70	
B—Corporate Secretary's Office.....	514.69	
C—Treasurer's Office	400.48	
D—Annual Convention	3,534.62	
E—Board of Directors.....	1,730.84	
F—Finance		
G—Promotion of Local Associations.....	302.32	
H—Ethics		
I—Renting	1.50	
J—Legislation		
K—Taxation	280.58	
L—Insurance	165.50	
M—Employment	.50	
N—Purchases	8.54	
O—Research	44.00	
P—Accounting and Exchange.....	1,271.02	
Q—President's Office	199.60	
R—Membership	645.47	
S—Apartment House		\$21,813.95

BALANCE

Cash—Columbia Trust Co., New York.....	\$ 2,247.47	
Cash—Executive Secretary's Fund, Chicago.....	1,500.00	3,747.47
		<u>\$25,561.42</u>

Audited June 20, 1922. W. H. Ballard,

C. S. Holbrook, Chairman.

TRIAL BALANCE

May 31st, 1922

	Debits	Credits
Dues—Active, 1921		\$ 1,420.00
Dues—Active, 1922		4,270.00
Dues—Affiliated Associations, 1921.....		500.00
Dues—Affiliated Associations, 1922.....		9,590.00
Credits due Affiliated Associations (Los Angeles \$5), (New Orleans \$10).....		15.00
Active Applicants Pending.....		380.00
Voluntary Assessments		3,752.85
Contributions (Duluth Association).....		160.00
Bank Interest		55.07
Profit and Loss.....		6,264.05
A—Executive Office	\$12,497.30	
A—Furniture and Fixtures.....	1,063.14	
B—Corporate Secretary's Office.....	514.69	
C—Treasurer's Office	400.38	
D—Annual Convention	3,533.62	
E—Board of Directors.....	1,730.84	
F—Finance		
G—Promotion of Local Associations.....	302.32	
H—Ethics		
I—Renting	1.50	
J—Legislation		
K—Taxation	278.08	
L—Insurance	165.50	
M—Employment	50	
N—Purchases	8.54	
O—Research	44.00	
P—Accounting and Exchange	1,264.02	
Q—President's Office	199.60	
R—Membership	645.47	
S—Apartment House		
Executive Secretary's Fund, Chicago.....	1,500.00	
Cash—Columbia Trust Co., New York.....	2,247.47	
Dues Receivable—Affiliated Associations.....	10.00	
	\$26,406.97	\$26,406.97

BALANCE SHEET, MAY 31, 1922

ASSETS

Cash—Columbia Trust Co., New York.....	\$2,247.47	
Dues Receivable—Affiliated Associations.....	10.00	
Executive Secretary's Fund (Chicago).....	1,500.00	
Furniture and Fixtures (Chicago).....	1,063.14	
		<u>\$4,820.61</u>

LIABILITIES

Active Applicants Pending.....	\$ 380.00	
Dues Payable (Los Angeles, \$5; New Orleans, \$10).....	15.00	
Profit and Loss.....	4,425.61	
		<u>\$4,820.61</u>

ESTIMATED RECEIPTS, MAY 31, 1922, TO DECEMBER 31, 1922

Active Memberships—

28 members, at \$20.00.....	\$ 560.00	
1 Resignation, 6/30/22.....	10.00	
5 Applicants, at \$20.00.....	100.00	
		<u>\$ 670.00</u>

Affiliated Associations—

Birmingham, 10 members at \$10.00.....	\$ 100.00	
Cleveland, 81 members at \$10.00.....	810.00	
Jacksonville, 1 member at \$10.00.....	10.00	
Los Angeles, 40 members at \$10.00.....	400.00	
New Orleans, to balance.....	50.00	
Omaha, 1 member at \$10.00.....	10.00	
Portland, 1 member at \$10.00.....	10.00	
Seattle, 2 members at \$10.00.....	20.00	
		<u>1,410.00</u>

Voluntary Assessments—

San Francisco, balance.....	\$ 510.00	
Seattle	440.00	
Cleveland	1,072.74	
Individuals	397.78	
		<u>2,420.52</u>

Miscellaneous—

Program of Convention.....	\$1,000.00	
Convention Receipts	200.00	
		<u>1,200.00</u>

GRAND TOTAL	<u>\$5,700.52</u>
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COMPARISON OF NET EXPENSES—1921-1922

EXECUTIVE OFFICE, CHICAGO

	1921	1922	Increase	Decrease
1—Furniture and Fixtures...	\$ 869.44	\$ 193.70	.....	\$ 675.74
2—Salaries	5,652.32	7,553.03	\$1,900.71	.....
3—Commission		348.40	348.40	.....
4—Rent		17.93	17.93	.....
5—Light	5.55	13.91	8.36	.....
6—Telephone and Telegraph.	89.32	134.74	45.42	.....
7—Supplies	525.29	428.48	.....	96.81
8—Stamps	279.38	563.75	284.37	.....
9—Printing and Bulletin....	1,910.46	3,187.54	1,277.08	.....
10—Transportation	1.70	.....	.....	1.70
11—Entertainments	2.85	62.85	60.00	.....
12—Dues	20.00	23.00	3.00	.....
13—Magazines	16.95	46.07	29.12	.....
14—Books	11.95	7.50	.....	4.45
15—Miscellaneous	66.17	110.10	43.93	.....
TOTAL	\$9,451.38	\$12,691.00	\$4,018.32	\$ 778.70

GENERAL ORGANIZATIONS

B—Corporate Secretary	\$2,445.60	\$ 514.69	.....	\$1,930.91
C—Treasurer	125.27	400.38	\$ 275.11	.....
D—Convention	882.23	3,533.62	2,651.39	.....
E—Board of Directors.....	1,394.86	1,730.84	335.98	.....
TOTAL	\$4,847.96	\$ 6,179.53	\$3,262.48	\$1,930.91

COMMITTEES

F—Finance				
G—Promotion of Local Associations	\$ 160.69	\$ 302.32	\$ 141.63	.....
H—Ethics				
I—Renting	100.00	1.50	.....	\$ 98.50
J—Legislation				
K—Taxation	51.20	278.08	226.88	.....
L—Insurance	44.00	165.50	121.50	.....
M—Employment		.50	.50	.....
N—Purchases		8.54	8.54	.....
O—Research	131.26	44.00	.....	87.26
P—Accounting and Exchange.	11.50	1,264.02	1,252.52	.....
Q—President's Office		199.60	199.60	.....
R—Membership	80.80	645.47	564.67	.....
S—Apartment House				
TOTAL	\$ 579.45	\$ 2,909.53	\$2,515.84	\$ 185.76
GRAND TOTAL	\$14,878.79	\$21,780.06		
NET INCREASE		\$ 6,901.27		

COMPARISON—1914 TO 1922 INCLUSIVE

	Cash on Hand.	Savings Bank.	Special Fund.	Sec'y's Fund.	Dues Re- ceivable.	Furn. & Fixtures.	Profit & Loss.
1914	\$2,095.55	.....	.....	\$ 200.00	.....	.....	\$2,295.55
1915	2,026.87	.....	.....	221.00	\$33.50	.....	2,282.02
1916	1,401.93	.....	.....	140.61	5.00	.....	1,547.54
1917	1,090.99	.....	.....	300.00	10.00	.....	*1,900.99
1918	591.73	\$1,407.53	.....	225.15	340.00	.....	*3,064.41
1919	2,179.91	30.81	\$755.00	74.23	380.00	.....	3,419.95
1920	2,869.70	1,000.00	.....	134.53	40.00	.....	3,044.23
1921	4,033.81	1,030.20	.....	300.00	.....	\$ 869.44	6,233.45
1922	2,247.47	.....	.....	1,500.00	10.00	1,063.14	4,425.61

*Include Loan of \$500.00.

TOTAL EXPENSES

1915	.....	\$ 2,593.91
1916	.....	3,946.67
1917	.....	3,837.49
1918	.....	2,455.26
1919	.....	4,057.75
1920	.....	4,637.36
1921	.....	14,009.35
1922	.....	21,780.06

TREASURER'S REPORT—ACTIVE MEMBERSHIP

List of members resigned, deceased or dropped for non-payment of dues since Convention, Portland, June, 1921.

DROPPED

Albany, Ga.	.....	Scovill, W. C.
Atlanta, Ga.	.....	Thrower, M. L.
Bloomington, Ills.	.....	Wilcox, A. R.
Detroit, Mich.	.....	Walker, Jas. H.
Columbus, O.	.....	Blacker, L. N.
Des Moines, Ia.	.....	Ayres, Geo. M.
Des Moines, Ia.	.....	Marshall, Don.
Fort Dodge, Ia.	.....	Dond, Robert P.
Great Falls, Mont.	.....	Emerson, Harry M.
Joplin, Mo.	.....	Howard & Brown Realty Co.
Lexington, Ky.	.....	Wilson, Jasper L.
Little Rock, Ark.	.....	Welch, G. M.
Milwaukee, Wis.	.....	Russell, Geo.
Minneapolis, Minn.	.....	Strong, A. D.
Minneapolis, Minn.	.....	Wheeler & Son, C. H.
New Haven, Conn.	.....	Daly, Matthew A.
New Haven, Conn.	.....	Leddy, Frank A.
New York, N. Y.	.....	Bolton, Reginald
New York, N. Y.	.....	Coverdale, R. J.
New York, N. Y.	.....	Johnson, O. T.
New York, N. Y.	.....	Opdyke, Henry G.
Oklahoma City, Okla.	.....	Bennett, S. G.
St. Paul, Minn.	.....	Friedman, Joseph
Philadelphia, Pa.	.....	Cole, E. Z.
Philadelphia, Pa.	.....	Fountain, L. W.
Richmond, Va.	.....	Palmer, Edwin A.
San Antonio, Texas.	.....	Stafford, C. P.
Waterloo, Ia.	.....	Lamson, C. O.
Winnipeg, Man.	.....	MacMillan, N. T.
Winnipeg, Man.	.....	Pickett, J. K.

DECEASED

New Orleans, La.....Christy, A. H.

RESIGNED

Atlanta, Ga.Watkins & Co., B. D.
 Boston, Mass.Eldredge & Co., E. H. (Paid to 12/31/22)
 Cedar Rapids, Ia.Higley, Elmer A.
 Cedar Rapids, Ia.Jandert, Adolph
 Cedar Rapids, Ia.Wokoun, Louis
 Cincinnati, O.Balch, George R.
 Coshocton, O.Selby, E. O.
 Davenport, O.Walsh, T. J.
 El Paso, Texas.Ramsey & Co., W. K.
 Hartford, Conn.Fisher, Herbert F.
 Hartford, Conn.Chase, Porter B.
 Kansas City, Mo.Henrici Lowry Eng. Co.
 Lynchburg, Va.Steptoe & Patteson.
 New Orleans, La.Nicoll, D. P.
 Peoria, Ill.Leisy, E. C.
 Philadelphia, Pa.McEwen, W. A.
 Pittsburgh, Pa.Fitch, F. J.
 Pittsburgh, Pa.Way, John J.
 Pittsburgh, Pa.Rafferty, K. F.
 Richmond, Va.Bowe & Son, N. W.
 Roxbury, Mass.Lane, Frank S.
 Syracuse, N. Y.Britcher, E. C.
 Syracuse, N. Y.Smith, Burns Lyman
 Sacramento, Cal.O'Leary, D. F. (Paid to 6/30/22)
 Tacoma, Wash.Grafton, A. E.
 Tulsa, Okla.Mayo, C. A. & J. D.
 Wooster, O.Foster, W. C.
 Worcester, Mass.Carter, D. W. (State Mutual Life)
 Worcester, Mass.Reidy, M. F.

ACTIVE MEMBERSHIPS LOST

30 members dropped for non-payment 1921 dues.....\$ 600.00
 29 members resigned to date (paid on account, \$30)..... 530.00
 1 member deceased..... 20.00
 \$1,150.00

AMOUNTS RECEIVED BY CITIES—ASSESSMENT PLAN PORTLAND CONVENTION

June 1st, 1921, to May 31st, 1922

Atlanta, Ga.\$ 169.28
 Birmingham, Ala. 48.70
 Boston, Mass. 164.14
 Buffalo, N. Y. 70.56
 Canton, Ohio 20.00
 Chicago, Ill. 1,861.70
 Davenport, Ia. 11.35
 Dayton, Ohio 60.00
 Denver, Colo. 101.48
 Des Moines, Ia. 30.22
 Detroit, Mich. 336.09
 Evansville, Ind. 5.00
 Flint, Mich. 5.50
 Grand Rapids, Mich. 26.57
 Great Falls, Mont. 3.05
 Indianapolis, Ind. 17.20

Kansas City, Mo.....	\$ 13.00
Knoxville, Tenn.....	10.00
Lexington, Ky.....	2.03
Lincoln, Neb.....	5.00
Little Rock, Ark.....	2.35
Louisville, Ky.....	15.77
Milwaukee, Wis.....	10.00
Minneapolis, Minn.....	95.00
Muncie, Ind.....	2.70
New Haven, Conn.....	21.32
New Orleans, La.....	20.00
New York City, N. Y.....	40.25
Oklahoma City, Okla.....	6.27
Omaha, Neb.....	126.02
Peoria, Ill.....	17.93
Philadelphia, Pa.....	15.25
Portland, Ore.....	213.24
San Antonio, Tex.....	19.46
San Francisco, Cal.....	75.00
Scranton, Pa.....	10.00
Tacoma, Wash.....	7.50
Toledo, Ohio.....	18.55
Vancouver, B. C.....	15.08
Washington, D. C.....	5.29
Wilmington, Del.....	38.00
Youngstown, O.....	17.00
TOTAL.....	\$3,752.85

MEMBERS AND ASSOCIATIONS WHO SENT CHECKS RE:
PORTLAND CONVENTION ASSESSMENT PLAN

ATLANTA, GA.	
Atlanta Assn. Building Owners and Managers.....	\$ 169.28
BIRMINGHAM, ALA.	
Brown, E. L.....	10.00
Empire Imp. Co.....	6.00
Going, J. A.....	3.00
Jemison, R. E. & Ins. Co.....	2.25
Kampen, H. R.....	9.00
Leshner, H. P.....	10.00
Lewis, John.....	6.00
Smith, E. L.....	2.45
BOSTON, MASS.	
Hardy, J. D.....	15.00
Newhall, C. A.....	10.00
Williams & Bangs.....	139.14
BUFFALO, N. Y.	
Armstrong, J. O.....	6.35
*Dann, E. O.....	2.09
Demming, F. W.....	15.81
Gould, H. J.....	5.39
Hunt, F. S.....	2.13
Mann, H. L.....	7.21
Molin Corporation.....	2.00
Morgan, W. P.....	2.96
Norris, H. S.....	3.78
Rice, A. H.....	4.16
Sidway, F. S.....	2.18
Smith, W. H.....	1.20

Thomas, C. H.....	\$ 9.25
White, S. P.....	6.05
CANTON, OHIO	
Harris, T. K.....	20.00
CHICAGO, ILL.	
Chicago Assn. Building Owners and Managers.....	1,861.70
DAVENPORT, IA.	
Nagel, Alma	1.35
Putnam Est., W. C.....	10.00
DAYTON, OHIO	
Brooks, C. W.....	5.00
Cappel, William	2.00
Coleman, George	.35
Geiger, C.....	5.00
Gibbons, A.....	3.00
Koontz, J.....	3.65
Lange, C. H.....	5.00
Lindsley, T.....	5.00
Maeder, E.....	5.00
Rike Kumler Co.....	5.00
Rowe, D. M.....	1.00
Riebold, F.....	15.00
Schwind Realty Co.....	5.00
DENVER, COLO.	
Denver Assn. Building Owners and Managers.....	101.48
DES MOINES, IOWA	
Fleming, R. J.....	20.00
Hubbell, F. W.....	5.00
Warner, F. W.....	5.22
DETROIT, MICH.	
Adams, J. J.....	11.70
Avery, W. A.....	31.15
Austin, H. A.....	67.41
Buick, W. D.....	10.00
Danahey, T. P.....	10.44
Kern, Albert	42.12
Lewis, J. F.....	10.00
Mac Lachlan, William	29.15
Manning B. H.....	20.00
Newcomb, B.....	40.00
Proppe, C. A.....	12.04
Vinton, R. H.....	10.00
Viser, N.....	27.08
Wells, C. S.....	15.00
EVANSVILLE, IND.	
Bader, A. F.....	5.00
FLINT, MICH.	
Bishop, R. S.....	5.50
GRAND RAPIDS, MICH.	
Dooge, Adrian	5.25
Spooner, J. W.....	5.00
Bliss, E. W.....	16.32
GREAT FALLS, MONT.	
Rogers, G. W.....	3.05
INDIANAPOLIS, IND.	
Schmidt, C. F.....	10.00
Wagener, W. T.....	7.20

KANSAS CITY, MO.	
Ellis, G. M.	\$ 3.00
Kennedy, W. J.	10.00
KNOXVILLE, TENN.	
Atkins, C. E.	10.00
LEXINGTON, KY.	
Compton, C. M.	2.03
LINCOLN, NEB.	
Waugh, S. C.	5.00
LITTLE ROCK, ARK.	
Baldwin, Warren	2.35
LOUISVILLE, KY.	
Fidelity & Col. Trust Co.	2.09
Louisville Trust Co.	3.68
Starke, L. F.	10.00
MILWAUKEE, WIS.	
Grieb, J. G.	10.00
MINNEAPOLIS, MINN.	
Minneapolis Association of Bldg. Owners and Managers	95.00
MUNCIE, IND.	
Johnson, A. L.	2.70
NEW HAVEN, CONN.	
Hotchkiss, W. H.	21.32
NEW ORLEANS, LA.	
Lynch, T. H.	20.00
NEW YORK CITY, N. Y.	
Smith, L. T.	40.25
OKLAHOMA CITY, OKLA.	
Callahan, L. D.	6.27
OMAHA, NEB.	
Allwine, A. A.	1.65
Benbow, F.	1.00
Boucher, B. J.	10.35
Drake Realty & Cons. Co.	13.26
Hastings & Hayden	17.24
Hunter Realty Co.	2.50
Jensen, M. F.	5.50
Kuhns, P. W.	5.90
Loomis, H. G.	11.10
Nelson, Mrs. H. R.	3.00
Peters Trust Co.	18.20
Sweet, Ernest	4.30
Thomas & Son, W. H.	4.62
Wolf, H. A.	25.00
Smith, B. W.	1.00
Wilson & Warren	1.40
PEORIA, ILL.	
Bourland, F. B.	2.93
Stacy, L. M.	10.00
Nathan, C.	5.00
PHILADELPHIA, PA.	
Dothard, R. J.	10.00
Vollmer, A.	5.25

PORTLAND, ORE.	
Portland Assn. Building Owners and Managers.....	\$ 213.24
SAN ANTONIO, TEX.	
Nix, J. J.....	5.46
Savage, J. H.....	14.00
SAN FRANCISCO, CAL.	
Stolz, J. E.....	5.00
San Francisco Assn. of Building Owners and Managers.....	70.00
SCRANTON, PA.	
Mears, J. P.....	10.00
TACOMA, WASH.	
Prichard, A. G.....	7.50
TOLEDO, OHIO	
Beinke, George	11.05
Mortimer, C. H.....	7.50
VANCOUVER, B. C.	
Robertson, F. M.....	6.61
Melhuish, G. W.....	8.47
WASHINGTON, D. C.	
Bradley, Thomas	5.29
WILMINGTON, DEL.	
Frederick, William	38.00
YOUNGSTOWN, O.	
Realty Guarantee & Trust Co.....	17.00
	\$3,752.85

It shows we cannot go along playing "church meeting" and passing the hat. We must either cut expenses or increase our finance. (Applause.)

MR. PRESIDENT: We said Frank Monville was a natural-born committee chairman. I am sure after listening to that report from an extraordinary building manager, we ought to be congratulated that this administration was supported by a near capitalist, who knows how to take care of his own and other people's money.

We cannot call this meeting to an end without thanking our old friend, Mr. Loomis. (Applause.) It was Mr. Loomis who took all the slang out of all the poorly-told jokes, and all the bad grammar out of last year's Portland convention, and put it into perfect Queen's English and published it. That needs a vote of thanks. (Applause, audience rising.)

We have three big, broad-shouldered, strong, capable men representing you as vice-presidents, and a fourth man who represents you as a member of the Board of Directors who have not been very prominently before you in the past. I am going to ask these four men to take the chair and relieve me of the arduous duty of conducting this convention during the entire week.

I will ask Dean Vincent to officiate over the convention tomorrow.

Mr. Thorpe makes his bread and butter by renting a lot of apartment houses in the City of New York. Wednesday is Apart-

ment House day and that division is coming into its own. It has a day on the program. I am going to ask Mr. Thorpe to take the chair Wednesday.

The next man is Mr. Shultz—big mentally. He is going to conduct this convention on Thursday.

Ell Torrance will conduct the convention on Friday.

You have been very attentive. I thank you. We stand adjourned.

Tuesday Morning Session

June 20, 1922

The Tuesday morning session was called to order by President Coley at 9:30 A. M.

THE PRESIDENT: I want to introduce Mr. Ermeling, the Executive Secretary of the National Association. (Applause.) I think you should know him by sight as well as by signature. He is the man who sends out thousands of letters and keeps our organization alive and going during the year. He is becoming quite a building manager by the absorption system. Men from Texas now call at the Executive Secretary's office to receive expert advice on how to manage buildings. The more we can pour into him, the better he will serve our Association.

In our program we have a public policy meeting scheduled for 8:30 tomorrow night. We were planning to have an address on a subject of national importance. Since the program was published, this plan has changed.

Fred Swetland is going to show stereopticon views of the tour de luxe from Cleveland to Portland via Southern California, and back through the Yellowstone to Cleveland. (Applause.)

This session will be led by our First Vice-President, Dean Vincent. At a show in New York recently a fellow dressed in white just the same as Dean Vincent is, came dancing out on the stage and said, "I feel like a bottle of milk!" (Laughter and applause.)

CHAIRMAN VINCENT: This is rather an embarrassing introduction, but I might retaliate by saying perhaps the members of the Association are in position where they might be interested in seeing a bottle of milk.

This morning we heard quite a discussion at the Breakfast Conference as to what pressure was being brought on the building manager by the owner. I think we are particularly fortunate that in the first paper of this Convention we will hear directly from the owner. The speaker is one of our past presidents. I will present Fred Swetland of Cleveland. (Applause, audience rising.)

The Owner

F. L. Swetland, Cleveland

I thank you most sincerely, but now that we have gotten the courtesies of this reception to me out of our systems, we will proceed with the business of this address.

You noted that Clarence Coley said I would *show* the lantern slides. He did not say anything about talking about the lantern slides and in this he was well advised. Realizing that I cannot talk, I have nominated Lee Smith to give the lantern slide lecture. He does not know that he is going to do it, but he will deliver the talk nevertheless.

Speaking of talkers, my loving friends in the Cleveland Association have this morning been trying to get me rattled, and I think they have succeeded. In this laudable attempt on the part of my friends, Howard Stahl said that when the Lord wanted to make a great singer he made Caruso and then when he wanted to make a good talker, he made Fred Swetland. (Laughter.)

During the last meeting of the Board of Directors of this Association, President Coley said that he wanted a paper for the Convention which would give the owner's side of our business, and asked who should be selected to present that subject. The members scrapped among themselves as to who would talk about "The Owner," and as I was the smallest fellow there, they picked on me.

I politely inquired as to what I knew about an Owner, but was met with the reply that if I didn't know anything about an Owner, I could probably find out between that time and the date of the next Convention. Anyway I was elected to present the subject.

Being in some sense an Owner, or at least a part Owner of a business property, my time is all taken up with the ordinary affairs of the Owner Business and I did not have any time to write a paper on The Owner, and as usual with me, put the unpleasant matter off until the last moment. I then got the paper which I will read to you shortly, in some sort of shape and wanting to know how it would strike the other fellow, asked my brother Raymond to criticise it. He read it and said, "Huh—it's a fool paper." (Laughter.)

I was naturally much depressed until I happened to think that Owners of business properties were a lot of fools or they wouldn't be Owners, and that a fool paper presented to fools, would probably get by, and we would all be fools together.

Thinking, however, that my brother's criticism might be unduly harsh, I then handed the paper to Charlie Doty. He refused to criticise it on the grounds that it wouldn't make any

difference what he said ; because I would still say what I wanted to anyhow and therefore it would be a waste of his time to tell me anything.

Of course in treating this subject, I must because of force of circumstances, be rather critical and I do make some pretty harsh criticisms of the ordinary run of building managers. But in talking to you I think that you will agree with me in everything I say.

If the managers and owners of the country were as alive to their best interests as are the men and women who are members of this Association, our business would be in a highly gratifying condition, both from an ownership and management standpoint. The mere fact of membership in this Association is proof of a wide-awakeness and alertness which, if it were general throughout the country, would utterly remove any point from these remarks.

Unfortunately, a large proportion of the managers of business properties of this country are not members of this Association. Most of them have never even heard of it and as a consequence we have, as you all know, a very unsatisfactory business.

This is not the usual apology to those present, and is not so intended.

You will recall that in preparing for our latest and never-to-be-forgotten meeting in Portland (beautiful Portland, Mr. Chairman), our respected former President, Colonel Strong, endeavored in his selection of papers and addresses, to give us what would forever after constitute a text book or some such work on the "How and Why of Building Ownership and Management."

In this laudable endeavor he asked our President to present at length, the subject or chapter entitled, "The Building in Plan," naturally assuming that in asking an acknowledged expert on the subject to write about the Building in Plan, an essay would be forthcoming which could well and profitably be studied by coming countless generations of Building Owners and Managers, to say nothing of the benefits our friendly enemies, the architects, would derive from such study.

Colonel Strong of course, thought that out of his knowledge and great experience (and I mean this) President Coley would show the best division of building floors into offices, the proper depth and width of offices, the spacing of the steel, the light ratio to square foot area, where service rooms and slop sinks should most efficiently be located—in short, take a given piece of land and on this land, develop a plan for an office building which would use the land to the best possible advantage and enable the fortunate owner to earn at least four per cent on his investment if depreciation was not figured.

But did our President stick to his subject as visualized by our Colonel? He did not. He left the subject early in his talk and wandered far over field and stream. When he had finished, the

Colonel got on his feet with some difficulty and rose to the full extent of his impressive height and said some nice and complimentary things about what our President had gotten off his chest, but one could tell from the expression of his face while he had listened to the "Building in Plan" that he felt that chapter of his text book had gone "blooey." It was a very good paper but it didn't fit with Colonel Strong's idea of what it should be. This wasn't President Coley's fault—it just happened.

Now our President has also some very definite ideas as to what the title "The Owner" should cover and when I get through manhandling that subject, he may try to say (you note I say "may") some nice things about this talk but he will feel that I haven't left a rag of the subject but the title.

But to get back to the Building in Plan,—no—I mean "The Owner"—the first and most pertinent thing is to find out "Why is an Owner?" At least, so it seems to me.

Why is an Owner? There are of course a number of reasons but judging from the common and general run of results, none of them are good and sufficient. Let's enumerate some of them perhaps not in their proper order.

A real estate broker feels the need of some money with which to buy himself a new car or perhaps pay a fine for breaking the traffic laws and in search of the means to satisfy this necessity, he casts his eye over the city's downtown district. Ha! he has it. Here is a parcel of land which perhaps is not as well located as it might be, still it has no building of any value on it and it can be gotten either by lease or purchase. He sees the owner—gets terms and his work is half done. The rest is usually easy for an unbuilt office building can be figured to be as profitable as raising chickens. The broker proceeds to figure it that way with the aid of his friend, the architect, and the engineer and I regret to say, sometimes with the aid of a would-be manager of the new building who should, and, usually does, know better.

I think it was Barnum who said, "There's a sucker born every minute," and someone has suggested that he overlooked what was happening in the other fifty-nine seconds—in any event, the crop is sufficiently large to insure of there always being an ample supply of first-class office space on hand.

Office buildings do not always happen because of this reason, but some such uneconomic cause has resulted in many of them.

For instance, we have the bank or institution which wishes the so-called advertising to be derived from building and owning the biggest or tallest or most costly building in town or in the State or in the country. Without any economic demand for the space, the bank proceeds to throw on an already overburdened market, anywhere from a hundred thousand to sometimes nearly a million square feet of the finest office space money can build.

Then also, we have the men of usually new and easily acquired wealth who wish to see their names go down to countless generations to come and to assure this, proceed to hunt up an architect and then to build the biggest or broadest or tallest or most marblized buildings in town or state or country. More thousands of square feet of the finest office space in the world is waiting for the swarming (?) tenants.

But why continue to call to mind the reasons or rather lack of reasons of the being of many of our office buildings; their name is legion. I have even known of an office building, and a very beautiful and costly one, to be erected for no more economic reason than that of spite.

So our buildings are built and naturally being built have an Owner and this I believe is the point which our President wished me to start from, so without wasting any more of your time I will endeavor to get away.

The Owner of an office building if he attempts to run it as a money-making business is confronted with a task which is discouraging and disheartening. To attain even a small measure of success he must call to his aid either at first or second-hand, a knowledge of many trades and professions. He must overcome the handicaps of a business which as a business is fundamentally wrong in many of its principles and practices. He must face a competition which is ignorant and therefore dangerous and in many cases utterly unscrupulous.

Because he is in what is called the Landlord Class he is confronted with the age-old prejudice, distrust and sometimes active enmity of the tenants.

I am not asking for any sympathy for the Owner because he will get none and in most cases—because he is an Owner, he deserves none. I am simply and briefly trying to voice what he is up against when he tries to make a profitable business out of owning an office building.

Personally, I have never been able to understand why a man, or a bank, or a corporation, or other entity after having become (through the expenditure of hundreds of thousands and in many cases millions of dollars), an Owner of an office or business building, immediately proceeded to put this tremendous investment in the hands of a person whose sole qualification for the handling of the property was that his salary was small.

Probably such action is simply the functioning of the same order of intellect which resulted in the ownership of the building

in the first place or it may be that the owner was appalled at the amount of the investment he or it or they had made and began to save money at the wrong end of the investment.

I think it self-evident that if the office or business building owners as a class had employed the same order of keen, alert-thinking and thoroughly-trained men as are and usually have been employed by manufacturers to run their business having a comparable investment in their plants, the office building business would today be a self-respecting and profitable one, rather than a depository for a lot of hard-working dollars whose owners evidently thought had worked hard and long enough and needed a rest.

That is one thing the office building business is pre-eminently good for—to give dollars a rest—and through the action of depreciation and obsolescence, to let them die in peace and quiet.

Up to the past three years, the office building business never had an opportunity or situation which would enable it to put itself on an earning basis. Due to the cessation of building some three or four years ago and the increasing demand for space because of the war and post-war conditions, the owners and managers of the office building business were enabled to increase the price for their service to an extent which probably would, if such prices could be maintained, justify the office building as an investment comparable with investments in other businesses of like risks.

It seems hopeless, however, that such a desirable condition can continue to exist, first because of the lack of co-operation among the owners and managers of business buildings—the general lack of understanding of the fundamentals of the business by a majority of the managers of such properties, and second, the re-entry into the field of cut-throat and senseless competition because of the throwing onto the market of a tremendous amount of space for which there is no economic demand.

Giving the devil his due, however, and calling your attention to the best showing up to date of the office building business as a desirable investment field, I wish that you would carefully study these two charts which give the results of the ownership and operation of twenty of Cleveland's best office buildings during the years of 1917-1918-1919 and 1920. Possibly, to make the very best showing possible, in the whole history of the office building business, the results of the year of 1921 should be included, but the figures for that year are not as yet available.

RETURNS ON TWENTY CLEVELAND OFFICE BUILD-
INGS. AVERAGES FOR YEARS 1917-1918-1919-1920.
BASED ON 1920 TAX VALUATION

Build- ings	Tax Valuation	Gross Income	Net Income	Per Cent Net Income
1	\$2,919,210.00	\$378,038.94	\$138,342.17	4.74
2	1,045,490.00	87,426.08	44,235.23	4.23
3	558,980.00	63,203.11	6,559.73	1.17
4	1,205,810.00	130,290.00	53,508.15	4.44
5	2,198,800.00	201,475.07	40,229.21	1.83
6	699,940.00	118,520.20	27,344.48	3.91
7	277,850.00	34,198.02	14,280.79	5.74
8	3,287,230.00	457,681.98	182,711.26	5.56
9	2,463,600.00	218,706.95	81,270.05	3.30
10	801,280.00	123,388.99	45,397.85	5.67
11	206,540.00	49,236.11	2,644.54	1.28
12	890,810.00	95,197.00	38,243.33	4.28
13	2,427,980.00	191,299.52	58,035.11	2.39
14	454,600.00	45,671.94	23,196.09	5.10
15	1,709,820.00	112,674.59	15,695.22	.92
16	1,697,590.00	204,579.53	94,924.73	5.59
17	1,148,290.00	142,798.62	41,601.73	3.37
18	684,280.00	40,851.25	23,500.00	3.43
19	1,182,020.00	111,708.63	32,942.07	2.79
20	1,769,570.00	251,889.78	54,670.87	3.09
Totals..	\$27,629,690.00	\$3,058,836.31	\$1,027,266.26	3.65

PERCENTAGE RETURNS ON TWENTY CLEVELAND
OFFICE BUILDINGS FOR YEARS INDICATED
BASED ON 1920 TAX VALUATION

Build- ings	1917	1918	1919	1920	Aver- age
1	3.06	4.10	3.93	7.86	4.74
2	4.03	4.20	4.20	4.50	4.23
3	.36	.75	2.08	2.23	1.17
4	3.52	4.54	4.47	5.21	4.44
5	1.54	1.32	1.63	2.82	1.83
6	2.05	3.22	3.69	6.67	3.91
7	4.01	5.04	6.45	7.44	5.74
8	3.50	5.50	5.80	7.40	5.56
9	2.01	2.98	3.70	4.51	3.30
10	5.26	5.10	5.36	4.93	5.67
11	1.54	1.01	2.33	6.93	1.28
12	4.36	3.93	3.74	5.12	4.28
13	1.50	2.70	3.01	2.34	2.39
14	4.82	5.07	5.53	4.99	5.10
15	.59	.71	.68	1.70	.92
16	5.76	3.77	4.74	8.10	5.59
17	3.90	4.79	2.42	3.37	3.62
18	3.74	3.28	4.46	2.26	3.43
19	2.62	2.95	2.30	3.27	2.79
20	1.84	2.61	4.22	3.69	3.09
Average totals	2.96	3.27	3.50	4.86	3.65

These charts are the only part of this paper or address that amount to anything and I did not have anything to do with preparing them except as an individual member of the Cleveland Association.

The data from which the charts here were built up, was gathered by the Cleveland Association through its Secretary, Mr. Frank Bicknell. This data gives a graphic illustration of the results of the office building business at its best.

If there is any business having an investment of some twenty-eight million dollars in any community, which cannot show better results than 3.65 per cent, I would like to know what it is, and who the men are that are conducting it.

The computations given in these charts are based on Cleveland tax valuations and in studying them this must be borne in mind. The Cleveland tax valuations as to the land element, rate approximately one hundred cents on the dollar of real value. As to the improvement or building element, the valuation is very much less than one hundred cents on the dollar.

If the actual and real value of the different properties shown on the chart were given in place of the tax valuation, the properties would show a very much less percentage of return.

Mr. Ermeling in commenting on these charts before this meeting, said that in Chicago, the business properties showed a better average percentage of return. I am not informed as to the basis of Chicago values or whether full real value was taken or not.

In explanation of these charts, it should be stated that in arriving at the Net Income, no sums payable for interest on land or building—federal taxes either income or capital stock, corporation State taxes, nor ground rent, were included in expense.

Considering that the City of Cleveland was probably, of all the cities in the country, in as good a position to take advantage of the favorable war and post-war conditions as was possible, it seems reasonable to state that the experience of these twenty buildings indicates a general average of experience or possibly better than the general average of experience of the buildings throughout the country.

With this deplorable condition of the office building business staring the owners in the face, of course some thought is being given to the problem of making investments in such business interest-paying and profitable.

It should go without saying that to accomplish this result the past and present haphazard, happy-go-lucky methods of conducting the business will have to be discarded and an entirely new system of sales be substituted.

It has been suggested that as a basis for a new sales method, it be considered that what the office buildings have for sale is not a commodity but a service. In other words, that the office building business is analagous to the insurance business. This analysis of

the business would seem to imply a regulation of rates by public authorities and some of us do not view with any alarm such regulation.

If this analysis of this fundamental of the office building business is correct, it would seem quite proper to fix rates for such service. This action might be followed by a pooling of all the office building space in each community and the sale of the use of such space conducted by an impartial and disinterested sales organization.

It seems quite possible that such a central sales organization could contract at definite wholesale rates for all of the space in the business buildings in the community. The element of competition which in its normal aspect is so desirable, would still obtain through the continued individual management of the different properties.

The thought embodied in the foregoing is as yet extremely vague and and unformulated. I am simply giving it to you as an indication of what is going on in the minds of some of the owners in their effort to solve the ever-present problem of how, having gotten their money tied up in an office building, can the investment be made to earn even ordinary interest.

I think that is all I have to say about our fool business. Thank you very much for your attention.

(Applause.)

THE CHAIRMAN: It is the intention that all these papers will be open for discussion. Have you any questions?

CHARLES S. HOLBROOK, Portland: I would like to inquire what depreciation is included in the net income?

MR. SWETLAND: Three per cent, figured on the tax value of the building, which as I said before is in Cleveland, generally very much under the actual value.

W. M. MACLACHLAN, Detroit: Didn't I understand you to say no deduction was made for depreciation?

MR. SWETLAND: No—I said no deduction from income in the form of taxes due the Federal Government, either income or Capital Stock taxes, corporation state tax, or anything chargeable to capital investment was made, as for example—no mortgage interest was deducted.

GUY H. WRIGHT, St. Louis: Did I understand you to say your assessor depreciates the building value each year?

MR. SWETLAND: He does not do it each year. The last two or three years he has not done it because of the marked appreciation in building values. Prior to that time he made two horizontal deductions of 10 per cent—took off of building values or improvement values, 20 per cent in two years.

MR. WRIGHT: We get an increase instead of depreciation.

THE CHAIRMAN: Do you get an increase in your building values?

MR. WRIGHT: My particular building was increased \$50,000 last year. The tax value has been brought up to the absolute cost of that building.

EDWARD M. APPLGARTH, San Francisco: We had a 15 per cent increase last year on hotels, office buildings and apartment houses, and left the rest alone.

I would like to ask, Mr. Wright, if the rents were increased too?

MR. WRIGHT: Yes, it increased the rent, and of course more so in certain spots than others. But the city has the last year made another increase after we were assessed one hundred cents on the dollar, and has put another 15 per cent on generally.

R. C. TREANOR, Salt Lake City: The tax values of our buildings have been increased very appreciably. I am not giving this for information; I am asking for information. Is there any way for us to get the tax rate cut? Our building is assessed 100 per cent and our land 100 per cent, and our taxes are 31.2 per cent.

THE CHAIRMAN: Was that increased any during the year?

MR. TREANOR: It is our assessed valuation for 1922. The building I operate in Salt Lake City is taxed 100 per cent. I want to get information if that is the procedure throughout the country generally, and if it isn't, what would be our method to get the assessments cut?

MOIR A. HODGIN, Winston-Salem: I wish to state for your information that North Carolina passed a law a little over a year ago assessing all buildings, and even personal property, at one hundred cents on the dollar. They figured the tax paid would probably be lessened, but we have not found it that way. We used to turn in tax valuations at fifty cents on the dollar. Now everything is assessed at one hundred cents and our taxes are higher.

JAMES F. COOK, St. Louis: I think Mr. Wright has given a wrong impression of conditions in St. Louis. We have not yet reached the actual valuation of the buildings. I think the present feeling is caused more because under our old assessment plan we are assessed at 65 or 70 per cent and this percentage is gradually crawling up; but we have not yet reached the actual cost of the buildings in our assessment.

WILLIAM H. BALLARD, Boston: Replying to Mr. Treanor, I assume under your statutes you have means for reviewing your assessment. It is a question of following your statute. In Massachusetts, the local assessors make the assessment. If property is over-assessed in the judgment of the owner, he may appeal to the county commissioner for a judicial hearing and readjustment of the assessed valuation. I assume your statutes have some similar relief which could be evoked.

MR. TREANOR: We have that belief, but our commission-

ers out there work on the theory of replacement values. One of our buildings was built thirteen years ago. They maintain they should tax us on the replacement value at 100 per cent. Our county commissioners and board of commissioners maintain they can tax us on a value of \$450,000, which probably is the replacement value of our property. If that is a general practice throughout the United States, I should like to know it. If it isn't, I should like to know it so that I could take the question up with our county commissioners.

MR. HOLBROOK: In that case, would you be allowed depreciation on replacement value?

MR. TREANOR: No, sir; not at all; not one cent.

MR. HOLBROOK: There is a local injustice there.

THE CHAIRMAN: It is probably covered by statute of your own state legislature that property shall be valued for tax purposes at 100 per cent. Outside of the psychological end, there is no injustice in it if everyone pays on the same basis.

MR. SWETLAND: I would like to suggest that in Salt Lake City they need an efficient local organization of building owners and managers because in handling such matters individually, you cannot get anywhere. If all your owners of business properties get together and say, "You may have a right to assess us on the basis of full value, but you must assess all other property on the same basis and allow us proper rates of depreciation," you will save yourself enough to pay your dues in the Salt Lake City Association of Building Owners and Managers for a good many years to come on the one item of the rate of depreciation, alone.

ADRIEN VOLLMER, Philadelphia: I would like to call Mr. Swetland's attention to his figures. He has shown the owner's position in a rather better light than I think it is. For instance, that 3.65 is an average of 1917 to 1920. If you take other years into consideration, you get a lower average, and that 3.65, if reduced to the purchasing value of money before the war would take you below 3 per cent.

MR. SWETLAND: I think you are absolutely right. I said to start with that I was giving you the best example I knew of. With probable developments of the near future in view, I think the curve, instead of going up, will slide down very sharply, principally because of the element of ignorant and uninformed competition. We won't be able to sell our space at the prices we have been getting for it the past year or two. We will have a lot of vacancies on hand which will sadly cut into revenue. In 1919 and 1920, two of the years covered by these charts, there were no vacancies in Cleveland office buildings whatever. Now we have something like a 20 per cent vacancy, considering office space alone. We have one of the worst situations in the United States, so far as the uncalled for building of office buildings is concerned. There are something over 500,000 square feet of the finest kind

of space vacant and waiting for the tenant. One of our big banks will put on the market about a million square feet of space. It is going to be one of the best buildings in the United States. It will have to be filled out of the old buildings, because Cleveland is not growing sufficiently rapidly to absorb all this vacant space for a long time to come.

E. M. HORINE, Atlanta: I want to ask in regard to the figures for Building No. 11. In 1917 it earned 1.54 per cent. In 1918 it lost 1.01 per cent, and in 1919, 2.3 per cent, and then jumped to a gain of 6.93 per cent in 1920. There is rather a remarkable situation there I would like to know if Mr. Swetland could explain?

R. H. SWETLAND, Cleveland: It seems to me that that mind, but if Frank Bicknell will whisper confidentially in my ear what building it is, perhaps I can definitely account for it without calling names.

R. H. SWETLAND, Cleveland: It seems to me that that question can be answered this way. If you will look at the chart, you will remember that in the operations of your buildings, the cost began to go up in 1918 and 1919. There was a tremendous increase in operating costs in those years. The space in many buildings on the other hand was sold for years to come at a fixed rental and tied up with leases. The building owners had to wait for the leases to expire before the income could be increased and consequently the operating cost was out of proportion to the rental income. That is undoubtedly the reason for the showing of that particular building.

We are probably operating the biggest fool business in the world. It is the only business I know of that sells its product for instance ten years in advance at a price figured on today's cost of production. The merchandise we manufacture and sell for ten years in advance is figured, when we make the contract for ten years, on the cost we have today. If we could sell our space on a declining market in that way, it would be advantageous; but for the past sixteen years the market has always been the other way. We have had increasing cost and taxes, a \$30,000 increase in one year on some of our properties—and lease contracts figured on the taxes in effect years before.

PRESIDENT COLEY: It is my opinion that we have a real opportunity in discussing this paper, for the idea of putting it upon the program was to show the danger signal to the country. I wanted the owners in our Association, and the managers who know the real story of the owners, to put in our records the facts; and if necessary, have pamphlets published later giving these particular facts. The pamphlets could be distributed among capital—impressing these facts upon the unsuspecting capital; upon the architect to take a little of his nerve away; upon the builder, upon every one engaged in the promotion and erection of office build-

ings. We want cold facts showing that the business of owning buildings is not all that it is usually represented to be. We can give personal experiences this year.

LOUIS T. CLARK, Los Angeles: Can you help us out a step further and tell what the increase of 1921 is over 1920?

MR. SWETLAND: The particular reason for the increase in 1921 earning over the earning of 1920, is the lapsing of long term leases and rerenting of the space at a higher rate. In the early part of 1921 we did not have the tremendous amount of vacant space on the market that we have in Cleveland at the present time. Most of the tenants renewed their leases and remained where they were and paid the higher rate. The better showing I spoke of as being made in the year 1921 is not a tremendous amount, but it is better than the showing of 1920. The 1922 figures are rapidly going down the curve.

CAPTAIN M. W. MCINTYRE, Cincinnati: Following President Coley's remarks, the Ohio Building Owners and Managers Association has asked me to collect these facts with the idea of sending out literature to banks, promoters, and salesmen in the State of Ohio—to give advance information so when a condition similar to that in Cleveland comes up, they will have the information to head off promoters.

As to taxation, the Cincinnati Building Owners and Managers Association has adopted a standard lease which contains a clause to the effect that the tenant participates in the increased tax after the lease is signed; so that the tenant pays the difference of any increase in the tax rate or valuation.

A. D. WILSON, Denver: I would like to ask if it is the consensus of opinion here that Cleveland is a fair example? I think there is a very peculiar situation in Cleveland if there is 20 per cent of vacancies. Throughout the west that does not occur. In Denver, it is probably less than 2 per cent. In two or three cities I know of, the average run of buildings will show a better percentage than the ones on that chart.

MR. SWETLAND: I think Cleveland is a fair example. This paper and tabulations have to do with conditions when Cleveland office buildings were 100 per cent occupied, not with present conditions in that city. As I said before, Cleveland was probably in as good a position as any city in the country to take advantage of war and post-war conditions. Cleveland as you know is a great industrial city and stands out especially among the cities of the country because of the diversity of its industries. Almost everything makable is made in Cleveland in sufficient quantities to make the different products nationally well known. The office buildings naturally reflected the advantageous position Cleveland held, in rentals to war industries, to government agencies, to branches of national corporations, etc. After the war, the peak industrial conditions were maintained, and of course these con-

ditions were reflected in office building rentals, so that, as I said, Cleveland was in as good a condition as far as office building rentals were concerned, as was any city in the United States.

We in Cleveland, do not contend that as a class, our office buildings are any more efficiently managed or show better earnings than is the case elsewhere, but I think that as a general average, you will find that the office buildings of other communities will not show any better earnings for the years covered by these charts than are shown by the Cleveland buildings, it being always understood that the buildings in other communities are placed on the same basis for comparison.

The valuation shown by the charts are as I said, tax valuations. The land element in these valuations is approximately 100 per cent of the real value. The building or improvement element is generally very much less than the real value, and this fact must be kept in mind when comparisons are made.

Our county auditor is extremely efficient and under our tax law he is able to keep his tax list value equal with real value. He, however, does not believe in assessing improvements at as high a valuation as he does land.

But this is a digression in an attempt to demonstrate that the rentals shown on these charts are average rentals. To get back to the vacancy part of Mr. Wilson's question, I wish to reiterate that the period of history of the Cleveland office buildings covered by the charts, was one in which no vacancy whatever existed. The 20 per cent vacancy I spoke of sometime ago is a present condition and applies only to office building space, not to ground floor or mercantile space in our buildings.

THE CHAIRMAN: Do you think under 2 per cent would be safe to go on?

MR. WILSON: I look at 20 per cent as beyond the average of buildings throughout the United States.

MR. WRIGHT: I would like to ask in figuring out interest, what basis of percentage of vacancies is used—90 or 85 or what? If you wanted 8 per cent on your investment, what would you figure for vacancies?

MR. SWETLAND: If I wanted 8 per cent on my investment, I would figure about a 10 per cent vacancy, which is the average vacancy history of office buildings throughout the United States, figuring over a period of years. I think a certain amount of vacancy with occupied space sold at a proper rate is not undesirable. You can take care of your tenants better and allow them to grow. You can make shifts and moves which are not possible if the building is 100 per cent full and more than all that, such a vacancy tends to discourage buildings for which there is no economic demand.

ARTHUR J. HOPPER, New York City: What was the mortgage rate of interest?

MR. SWETLAND: It would depend upon the individual case. The rate as a general thing was 6 per cent during these years; and the premium for selling the bonds and securities was from 5 to 10, and sometimes 15 points. If it was an insurance loan, you had to pay two points usually for your loan. Our buildings in Cleveland are mostly built on 99 lease-holds. The insurance companies as a general rule will not loan on lease-holds, so we have to finance our buildings with the Investment Banker's aid. We have to bond our properties and sell the bonds to the Investment Bankers. They usually demand from 7 to 15 points for their profit.

W. I. LEWIS, Cleveland: I would like to ask Mr. Swetland whether in figuring vacancies, he included the new buildings which are not yet ready for occupancy? We have had quite a number of new buildings come in, and while the situation is serious, as a matter of fact, our vacancies are not as much as 20 per cent unless you take into consideration new buildings not ready for occupancy.

MR. SWETLAND: I took into consideration all buildings in the down-town section of Cleveland with the exception of the Union Trust Company building. The new Keith Building, while not yet completed, is getting some of our tenants at the present time. I have included all other important buildings in the general statement.

MR. LEWIS: I was under the impression we were running somewhere around 13 per cent vacancy including the Keith building, but not the Union Trust Co. Building.

MR. SWETLAND: I think, Mr. Lewis, that you were under that impression because of the fact that in making our vacancy reports to the Cleveland Association, we include in the total rentable area given, all of the rentable area of the Building, ground floor space, mercantile space on the upper floors, and all office space. I believe that in this discussion we are only interested in the office space vacancy and my statement is based on that presumption. The figure of 20 per cent is of course an approximation also.

J. CLYDESDALE CUSHMAN, New-York City: To my mind, Mr. Coley has hit the nail on the head. I think it is a wonderful thing to have the true status of the building situation shown here today. Last Thursday, I was called into consultation by an owner of large property in New York, who asked me what I thought of the statement of operating charges prepared by a broker who was very anxious to sell a piece of property to him. The owner told me the broker had stated in his estimate that the building would cost fifty cents per cubic foot and fifty cents per square foot to operate. This was a building of twenty stories, with a net floor area of about 250,000 square feet. I figured roughly it could not be done—that the broker's figures were very

far from the actual fact. My personal feeling about the operating cost was it should be nearer seventy-five cents per square foot in a first-class office building in an important location.

In order to justify my position and get some good support, I called Mr. Coley from that office during that conference and got him on the wire. We had a building of about 500,000 square feet. I asked him his opinion as to how it compared with the —Building of about 250,000 square feet. Mr. Coley agreed with me that an operating cost of fifty cents per square foot was not possible. He stated without my mentioning it, the exact figure I had estimated of seventy-five cents.

I think this is coming right down to the meat of the explanation of why our buildings do not produce better net returns: owners are prevailed upon to build new buildings on very beautiful figures prepared by men who do not know anything about managing buildings. This particular broker does not manage a building or rent space in any building. He is purely a promoter. He has sold a great many buildings on that basis. I know some of the buildings he has proposed that have subsequently been built, and they have not produced the returns he estimated would be produced. Owners are led unwittingly into putting real dollars in cold storage, following right along the line of Mr. Swetland's address.

I think Mr. Coley hit the nail on the head when he proposed we get down to the real basic facts. If we could prevent owners throughout the country, and particularly in the large cities, from listening to the importunities of unscrupulous brokers and those who are led to induce owners to go into building ventures on facts which are without foundation, through the distribution of such figures as Mr. Swetland has prepared, I think it would be a good work for the National Association and all the local associations.

That little experience I had with Mr. Coley incidentally exemplifies the great value of the local association. If we had not had an association, I would not have known Mr. Coley and have felt free to call him and ask that pertinent question.

CORBIN M. DUNCAN, Little Rock: I had an experience something like that of Mr. Cushman. There is an institution in our city that has been contemplating the erection of a building for two years. About a year ago the President of that institution came into my office and said: "I would like to know something about what an office building is good for as an income producer." He showed me the estimated operating expenses an architect had given—a very elaborate estimate—I do not remember all the figures. He was contemplating a building of about 50,000 square feet. The architect had estimated the payroll at \$9,000 a year. Our building is a little larger than the one contemplated and my payroll last year was over \$20,000.

I showed this gentleman our books running back for ten years. Our experience over a ten-year period was about the same as that given in Mr. Swetland's figures. This particular office building is not going to be built. An increase of 50,000 square feet in our little city in that time would have been rather serious, not having been built it enabled us to readjust our rates to a point where our buildings are now profitable. If it had been built, you can readily imagine what kind of a fix we would have been in.

MR. MACLACHLAN: With 20 per cent vacancy, why would you allow only 10 per cent? Why not make 80 per cent as the income necessary? It is surely far better to have a building 80 per cent full at 80 per cent rentals than vice versa. If it has a vacancy, a lot of people think it is a disgrace. You must have shoes on the shelf before you can sell them. I think the necessary income should be figured on 80 per cent occupancy.

MR. SWETLAND: I agree with you in your statement that it is much better to have our buildings 80 per cent full at rates of rental which would show fair earnings on a 10 to 20 per cent vacancy than it is to have our buildings 100 per cent full at rentals which will show less than ordinary savings bank interest on the investment.

It is in my opinion as you indicate, an abnormal situation when buildings are 100 per cent occupied. At the present time I believe that Cleveland and New York City show by far, a greater percentage of vacancy in office space than any of the other cities of the United States. This is likewise an abnormal situation in both cities and I am hoping that a similar situation will not spread to the other cities of the country.

I think the history of the office buildings of the United States will show generally, an average of ten per cent vacancy, and that seems to be an ample amount of space on hand to sell or to trade with. When you increase this percentage to 20 per cent of vacancy, I am afraid that you cannot increase rentals sufficiently to take care of this abnormal amount of vacant space. It has been my experience that the rentals in such a condition will remain the same or may be lowered so that in my opinion when figuring the returns on our properties, if we allow 10 per cent of the gross rentals for vacancies, we will be coming out somewhere near right in actual practice.

MR. MACLACHLAN: Building No. 11 on the chart indicates the condition a lot of buildings went through. I do not know why there should not be an additional percentage included to provide for lean years.

MR. SWETLAND: Probably we should include in our figures, an amount for contingencies which would care for lean years, extraordinary expense of repairs and such items. All of our big corporations in making up their overhead, figure in a certain amount for contingent expense.

MR. APPEGARTH: I would like to ask Mr. Swetland what the vacancies were during the year 1920 when some of the buildings earnings got up to 6.93? Is it not because you got your rental rate fairly reasonable when if you were taking it without lease it would be a profitable proposition? The promoters using that rate were able to interest capital when they would not have been otherwise. As soon as we begin to get where things look favorable, somebody throws a monkey wrench into the works again. It seems to me our most important job is to keep that man where he belongs.

MR. SWETLAND: Generally speaking all Cleveland Buildings were 100 per cent occupied in 1919 and 1920. Rental revenues went up at the same time mostly because of expiring long time leases. As you say, some promoters misrepresented these facts and promoted some buildings. The history of each office building is widely different from every other building, except in general aspects. One of our best buildings was put up for no more economic reason than spite. There was no demand for space even when that building was projected. The cost of that particular building makes it necessary in order to produce an 8 per cent return to get an average rental of \$3.41 per square foot. The selling price of space in Cleveland even today will not reach that figure. Cut-throat competition will further reduce the chances of that building ever being able to earn even savings bank interest on the investment.

THE CHAIRMAN: Do you think with proper co-operation of your Association, it will be necessary to cut rates?

MR. SWETLAND: The disturbing element in such a situation is not among members of the Association, but because of non-members, which, for one reason or another have not become members of the local association, and will not co-operate with the members of the association. For instance, a misguided individual or entity, builds an office building for which there is no demand, locates this building away from the center of things, and naturally expects to tenant the building at paying rates. As soon as the building is ready to be occupied or even before such time, it is discovered that the tenants do not come into being simply because some additional space has been provided for their accommodation, and what to do to get the building occupied becomes a very pressing question.

The ordinary procedure in other lines of business endeavor is to cut the price of the new commodity if it is in competition with old established products in order to get business.

Such cutting of prices in almost every line of production tends to increase consumption, and the uninformed investor in office buildings figures that the same thing will happen if the price of office space is cut. We all, through bitter experience, know that this is not a fact but in cases such as are under con-

sideration, we all have to go through further bitter experience to demonstrate this to the new building owner. There seems to be always some such element to upset your co-operation as soon as you get set to go ahead on a profitable basis.

MR. APPELEGARTH: We began to think in San Francisco that we might be getting too many buildings, so we charted the office space in San Francisco from the time of the fire until today, and carried that with the projected buildings for the next two years and found we were increasing 750,000 square feet in two years, which will give a vacancy of 6 per cent in 1924, provided the deduction on the curves is correct. We felt it was necessary in order to develop some definite ratio as to what increase in office building space is legitimate in proportion to population increase. We find in Chicago the average tenancy is 6.1 per square foot per capita of the population. Portland was close to that. Seven was the maximum. We are trying to work out definite arrangement and giving publicity to the end that the capitalists will find out the market before they build. One man starts to build and the next man gets the fever. When one architect gets an office building job, he tries to get another. We are needing space badly because we had no building during the war, but it is not good to carry a good thing too far.

JAMES J. SAYER, Portland: I hold no brief for the broker, but let us not lay it all to him. The other day I was in a city where they had opened a new building with 100,000 square feet of space. I asked the manager what he was getting for his space. He said, "Two dollars." I went to the President of the local Association and he said in the new building he knew 500 square feet went at about \$1.25.

EARLE SHULTZ, Chicago: I am glad to notice the general impression is we should give more information to the investors in office buildings, because Secretary Ermeling's office in Chicago has been trying to do something of that sort. For the past four months he has been communicating with the Investment Bankers' Association along these lines, with the result that at their last Governors meeting, Mr. Fox, of Milwaukee, Chairman of their Mortgage Loan Committee, called at the office and got a copy of our Accounting and Exchange and our Obsolescence reports and laid them before the Directors of the Investment Bankers Association. These men were interested and ordered six hundred copies of the Obsolescence report and will send a copy to every member of their Association. I think that will have a very good effect. I would suggest if several of the associations would prepare a list of the bankers and owners in their cities and will send these lists to the Association office; or order copies from the Association and circulate the financial interests in their own cities, I think they will be helping this whole movement along. (Applause).

DAVID WHITCOMB, Seattle: In Seattle we have been trying to reach this same situation by having the Secretary of our Association address a letter to each man who we find is considering erecting a building, offering him the facilities of the local association and the information of the National. Without any criticism at all, we say we understand he is considering building and are glad to put our resources at his disposal, and hope when the building is completed he will become a member of the Association.

In several cases we have surprised him considerably as to the return and some buildings that would be a menace to us we believe will not be constructed. If you will do that, you will not only put information directly in the hands of the man who is considering spending the money, but do it in an apparently unselfish way. (Applause).

HOWARD G. LOOMIS, Omaha: For several years the Omaha Association has conducted an Experience Exchange. The members of that Exchange have the reports of all the other buildings on their desks.

I want to cite one instance which occurred recently. A broker came to me and said he was contemplating building a building similar to one of the smaller buildings in our city, and asked for figures on operating cost. He told me what he had assumed would be right. As the information of our Exchange is not to be made public except to those who contribute to it, I told him I would get the information and let him know shortly. I did within an hour, and told him exactly what this other building was doing for the previous year or two. The result was his building was not erected. (Applause).

LEWIS B. ERMELING, Chicago: Carrying the comments of Mr. Shultz one step further, I think the members will be interested in a recent happening in Chicago where a building was underwritten by three investment bankers. In their estimates, they showed the operating cost of the building as 33 1-3 per cent of the gross income. From the 1921 statements for the Experience Exchange figures showed that this estimate was at least 20 per cent low. In order to check further, we took three Chicago buildings which would compare with the building under discussion. We found the lowest one of the three buildings (and the most efficiently operated) ran 44 per cent. A well operated building on the same street ran 57 per cent of its gross income as operating expense, without figuring any reserve for depreciation or obsolescence.

J. G. MORGAN, Boston: I am in sympathy with what Mr. Swetland has said concerning buildings. I should like to approach this problem from the operating standpoint. When an architect or broker or promoter comes to an owner and gives this fifty cents per cubic foot cost, and they prepare their plans and find out they

can't produce it at that, what happens? They commence to cut their equipment. Supposing they cut on their chief equipment, what happens? Within two or three years they will find they can not produce their operating figure of fifty cents. It goes up because they must replace that cheap equipment. They find themselves in a position where their building is built, the equipment is in, and they cannot produce the revenue. There are three men in this room I know have been traveling about the country in the interest of owners who expect to erect a building. If they should find they are in the same boat as these men who say they can put up buildings, and come to a point where their bids are in and their cost per cubic foot is running over, the architect says, "Let's take the cheap equipment."

The Federal Reserve Bank Building did not need money. They did not have to build a cheap building. Yet in five different cases they have accepted inferior equipment. In one case they put a valve on the ends of their radiators that will cost 33 1-3 per cent more to operate than if they had bought the better equipment which would have cost 10 per cent more.

LEE T. SMITH, New York City: An architect wanted to put elevator enclosures in the Sinclair Oil Building. One contractor said he could put them in in three months. Mr. Sinclair finally accepted a contract for about \$12,000 more. He can justify that expense over a period of five years, and for the balance of the fifteen years he has good equipment at a low operating cost. If you are interested in the future of your building, overlook the first cost and do not put in the cheap equipment. You will then be where you can produce service; and if you do that, instead of having the building go down hill, you will have a reputation. At the end of twenty years, instead of the building being worth 60 per cent, you have built up a clientele which no man can take away from you. Your head will rest easier, too (Applause).

THE CHAIRMAN: We would like to hear from Colonel Strong. (Applause.)

COLONEL GORDON STRONG, Chicago: This all has a very reminiscent look to me. Two years ago I was doing what Fred Swetland has been doing—reading a paper on the returns from office buildings. Fortunately for him he is beyond the pale and you cannot punish him the way you punished me.

About a year ago we were trying to make a much higher rate of rental stick in The Republic in Chicago. I began to give a good deal of thought to how we could educate the people we wanted to educate to pay these rentals. So I got out a little book on the subject and filled it with all the tears in my system. I was addressing our tenants, trying to get them to see the thing from our viewpoint.

Then I thought, "Our rentals are not made *inside* the walls of this building, but *outside*. If we were making the rentals in

this building, we would not make them three dollars a square foot; but six, or twelve dollars. It is the other managers and other tenants in Chicago who are determining rentals in our own building, and we have very little to say about it except as we say it to their tenants and managers." So I increased the edition of my pamphlet and distributed it generally in Chicago.

This is an example of the fact that Fred Swetland has pointed out to you—that the only way in which we can get adequate returns is through publicity—that publicity based upon a local association. We can do what we please inside of our building; we can give the best sort of service Mr. Morgan can devise in the way of fixtures and equipment; but we cannot get returns on the investment unless we are organized for the purpose; and unless we proceed on the basis of education, propaganda publicity.

PRESIDENT COLEY: As well said, in this discussion and in the publicity that will come from it, we are doing the best we can for our properties. We cannot devote our time any better than to the determination to make these figures as public as possible, and by this means develop an adequate return. (Applause.)

THE CHAIRMAN: I wish to express the appreciation of the convention to Mr. Swetland for his valuable paper. (Applause.)

Up in Seattle they have probably one of the best building owners' association in the United States. It not only operates efficiently, but smoothly in every way. There are quite a number of men up there, but one who does all the work. He is here today and is going to take the place of Mr. Horton. I take pleasure in presenting Mr. J. T. Curran, Secretary of the Seattle Association. (Applause.)

MR. J. T. CURRAN, Seattle: It is to be regretted Mr. Horton is not here to present this report. All of you who know Mr. Horton will understand only business of the most important character could keep him away from this convention.

Report of Committee on Ethics

To the Members of the National Association of Building Owners and Managers:

At the meeting of this body held at Portland in June, 1921, you adopted a Code of Ethics, a copy of which was sent to all local associations for their approval and adoption.

The following local associations have adopted the code with a few modifications to fit their needs:

Portland.

Dayton.

Seattle.

Memphis.

Salt Lake City.

Louisville.

Your committee feels that the adoption of this code at Portland in 1921, is the one step in the right direction that will do more to cement members of local associations than any one thing and also make local associations familiar with the national work.

COMMITTEE ON ETHICS.

Charles E. Horton,
Chairman, Seattle.

THE CHAIRMAN: The subject of ethics is rather a touchy one. I do not know whether we had better open up discussion on that or not. In presenting the next paper, I imagine our friend, Scott, will have a difficult time convincing us there is a profit. I do not know of anyone better qualified than he is. I have an old school friend in New York, and every time he has a construction problem in office building he calls up Mr. Scott to get his recommendation. I take pleasure in presenting Mr. Douglas G. Scott of New York. (Applause.)

Determination of Profit in Office Building Rents

Douglas Grant Scott, New York City

You have heard my paper at breakfast. It is a subject Mr. Coley has given me, so I will speed it up. The way this thing is left, I must attack it entirely from another angle or you would throw me out of the window. (Reads.)



It has been said "that analytical power should not be confounded with simple ingenuity; for while the analyst is necessarily ingenious, the ingenious man is often remarkably incapable of analysis. The constructive or combining power, by which ingenuity is usually manifested, and to which the phrenologists have assigned a separate organ, supposing it a primitive faculty, has been so frequently seen in those whose intellect borders otherwise upon idiocy, as to have attracted general observation among writers on morals. Between ingenuity and analytic ability there exists a difference far greater, indeed, than

that between the fancy and the imagination, but of a character very strictly analogous. It will be found, in fact, that the ingenious are always fanciful, and the truly imaginative never otherwise than analytic."

To prove to the National Association, the discipline enforced upon the members of the New York Association (and not through an exaggerated ego), under orders of President Coley, I am here this morning to present a paper on the "determination of profit in office building rents." A paper to my mind to be of intrinsic value, must not be intended to cover a subject like a problem in arithmetic, so that the answer is found in the last column; and, furthermore, on this subject I would not have the potential ability to prepare one. However, if I can present the subject in such a way that it will stimulate the analytical powers of many of you, to destroy by either inductive or deductive analysis, the premises of my own simple ingenuity, perhaps we may all be lead from darkness into light, for it is generally agreed among psychologists that no combination of brains is stronger than the smartest brain in the combination; no ten men locked in a room could have invented a telephone without the presence of Mr. Bell; one hundred men under the same conditions, could not have in-

vented the phonograph without Mr. Edison; one thousand men writing poetry for one hundred years would never have produced the "Merchant of Venice" without a Shakespeare; perhaps in this very room we may develop (figuratively speaking), a Euclid, who will propound a self evident truth as an established principle by which all building managers may indefinitely determine their profits.

I will first take up the word "profit." In this word we have the crux of the whole subject, it means intrinsically, "any advantage, benefit, gain, or good accruing." Gentlemen, the first buildings produced by man, were produced fundamentally, to protect man from the elements. If the roofs did not leak, and wind and storm did not destroy them, there was both advantage and benefit; hence, profit. When the tombs of the Pharaohs prevented the jackals of the desert from waxing fat upon their bodies, again there was advantage gained; hence, profit. The cathedrals, particularly those classic Gothic masterpieces, built during the dark ages, had the desired effect upon the minds of the people; religion ruled the world, hence profit to the organization that built them.

Today in practically every city in the country, particularly in New York, we have innumerable monuments, temples, or tomb stones, whatever you desire to call them, designed and projected by the advertising departments of large industries, or to follow out the small boy's conception of what a bank should be, and where in many cases individuals are not able to perpetuate their names by election to public office, or leaving behind them male offspring. We have buildings of most artistic merit, whose architectural lines are perfect, built from the finest materials from the heights of some, we are told in the public press, that the days are five minutes longer; their length, breadth and thickness rival King Solomon's temple. I regret to report, a careful analysis in some cases show profit raised to the n th power, but not of a pecuniary nature, except that the owner may sleep peacefully at night, knowing that his property will not be stolen. These buildings are usually the fruit of the brains of the broker who sold the land for a commission, the broker who secured an adequate mortgage for a commission, the architect who produced the plans for a commission, and the contractor who erected the building on a percentage basis, together with the vanity of the institution or individual that was the victim of the aforesaid mentioned. Perhaps some of you have managed this type of building. I know that I have, and will always remember it.

In New York, I am ready to state, the chronic condition always has been, and I believe will continue to be, an oversupply of offices, and this oversupply chiefly caused by the type of building I have just mentioned, throwing on the market surplus of space not used by the owners, after having on account of rent value, built as high as the city departments would permit, by so doing attempting to secure theoretical profit, thus lowering the

annual fixed charges covering the space occupied by themselves, and by so doing creating and marketing virtually nothing but a bi-product of their own housing facilities, hence this excessive bi-product, which we have always allowed to be a contending factor in the market value of office space in general. Now, the tenant, or purchaser, as it were, gifted in the usages of exaggeration and hyperbole, has used this excess to a big advantage to himself, and naturally to the detriment of the producer.

Of course, the fundamental in real estate is land, and the word real means actual, not fictitious or imaginary, therefore, unimproved land is real estate. When we decorate it with a beaver pond, and do not surround the pond with woods, so that the beaver will consider same a practical habitat, or decorate the land with a forty story office building, with steel centers on wrong dimensions, offices fifty feet deep, with port hole windows, we have created from the real a fictitious or an imaginary estate.

The value of land in any city should increase in proportion to the growth and population in business. However, it usually stays behind five or ten years, or discounts the future for the same length of time. In New York in 1866, although the population has tremendously increased, real estate and land was selling much below its actual value, but by 1873 it had increased in some cases to one hundred per cent, and was not worth the then market value. And so on in the histories of other cities you will see this swing of the pendulum portrayed. Today I believe land is selling in New York at its relatively true value. I have touched on this subject of land because of the fact that it is self evident to all, it costs practically as much to erect an office building in Cheyenne as it does in Portland, figuring steel erection, labor, freight rates, etc., and that the land value really controls the manufacturing cost of the commodity we market, and it should, because the public should be willing to pay more for the privilege of sharing the occupancy of land valued at three hundred dollars a square foot, than that valued at one hundred dollars a square foot.

But now I think you have had enough of the concrete side of my text. The battle between ingenuity and analytic ability has not been an even one. It is about time I began to be abstract. As I hinted before, there is one thing important in this world, one only, "thought." Listening to the reading of a paper on any subject is nothing, the desire to think and "to think" is all. Thinking is said to be to listening as digestion is to eating. Each must discover for himself there is little use in relying on others to do for you.

I recall the conversation of the late F. W. Woolworth at the time he was erecting his building, when he said that he had that day purchased the entire year's output of eight hair pin factories, and when asked how he arrived at an equitable price, he exclaimed that each seller knew what it cost him to manufac-

ture a single hair pin; and any successful manufacturer must have equal knowledge in his own line to be more fleet of foot than the sheriff. How many of us know what it costs to manufacture a square foot of office space, on a per annum basis, without consulting the stars or the ouija board? In fact, how many of us can tell, as I have often said, what it cost to open our front doors in the morning. Labor costs and overhead draws no line between the office building and the brickyard; and the man who invented overhead was no slouch. He should be ranked with Fulton and Watt.

Returning home from a festive occasion about 5:45 a. m. I had to pass the Equitable Building. I saw a little round man with a porter's cap, blue coat and red pants, with a tea kettle of hot water, thawing the ice, so that he could open his revolving doors. I said, "Coley, while you show this ability, aptitude, and loyalty (an ounce of loyalty is frequently worth to a building a pound of brains), do you know it costs you two dollars and thirty cents a square foot for every rentable foot in your building to open your doors and sweep out in the morning?" Well, you should have seen Coley's face. He threatened if I said that again he would scald me, and he was so mad he would not tell me what it did cost him, but I give him full credit, *he* knew.

I mentioned before, the intrinsic meaning of the word profit. We all know the relative meaning in our line of business; what remains after all expenses are paid.

Some authorities claim that ninety per cent of all businesses started are doomed to failure, and ninety per cent of these failures are due to lack of knowledge in cost accounting. The average business man believes that if his cash receipts are greater at night than when he started in the morning, he has had a successful day. While in all probability the cash register was the worst system of measurement he could have used. We can be weak with our incidentals if sufficiently strong in our fundamentals, but you cannot reverse them. Soundness in the depreciation and obsolescence count far more productive than arguing with a salesman over the number of turkey feathers in a duster.

We all know we must predicate our earnings upon gross rents, and said rents must be sufficient so that a building may become corpulent or lean upon the way we disburse them. We can own the fastest horse, and pay the best jockey to ride him. If the horse has had no oats for a week, he will probably become disinterested towards the finish of the race, and finish among the "also rans." Therefore, to deferentiate between gross and net rents has become a lost art with most of us, because we have never analyzed as carefully as a manufacturer in other commodities, to determine the difference between production and output costs.

The company whose buildings I manage, has for twenty years owned and operated never less than thirty million dollars

worth of property (owned and operated), I contend to be only a figure of speech, in reality they have manufactured and marketed fifteen hundred thousand square feet per annum. Through its principle subsidiary it has erected hundreds of millions of dollars worth of buildings for other people. We have not only learned by going through the most expensive school in the world, "experience," we have to render quick judgment upon propositions brought by others for the reason we have been frequently called upon to help finance a project so as to secure the building contract. Invariably they attempt to prove by the prospective earnings that the second mortgage can be easily amortized, that being the manner in which we are to receive most of our profit. So I take the privilege this morning of bringing before you one of our thumb rules, a result either of my ingenuity or analysis, or perhaps my fancy and imagination, that is for you to decide. The premise of the rule being in the original production cost of every net rentable square foot. I attempt to handle a square foot, relatively, the same as if we manufactured and marketed fish hooks, lawn mowers or locomotives.

I first take the square foot cost of the land, and add to it all moneys expended on a square foot basis. For instance, I find that office buildings (so-called, many of them being monuments for decorative purposes, or tombstones of departed ambitions) vary from ten to thirty dollars a square foot, and are usually assessed at a rate twenty per cent less. We now have the original cost and are ready to start manufacturing. It is universal knowledge, and I substantiate it by the remarks of the late Russell Sage, "we begin by borrowing the other fellow's money, at no more than a legal rate of interest." I have assumed that we use fifty per cent of our own capital, and fifty per cent loaned to us on mortgage, provided our building is a success. The more money we can borrow, the greater percentage of net profit, and the hypothetical case I have just set up, I have amortized the mortgage on a one and one-half per cent basis, which you will learn is practically the same as allowing two per cent per annum for the depreciation on the cost of your building. For the year 1922, I have allowed seventy cents a square foot to cover all operating costs, including supervision. Some of you operated for less, and the profits vary accordingly. I have based taxes upon eighty per cent total cost, and you are liable to find the answer will be the same in all parts of the country, no matter by what method you arrive at it.

Now, another point I desire to bring out right here. I believe capital invested in such a product as ours, is entitled to earn not less than ten per cent. The equity I construe purely as capital. If you have one million dollars of your own money invested in a building, that is your capital. Any capital investment that borders on the hazardous is entitled to a greater yield than government bonds or saving bank interest. A man should

be repaid for his foresight, benefit to mankind, for it is a benefit when we make it possible for industries or professions to conduct their business upon land more valuable than they can afford to own.

I find on possessing a ten dollar a square foot building in New York City, the manufacturing cost before profit would be \$1.32 a square foot. If we sell our entire output to make ten per cent on our capital, we must sell at \$1.82 a square foot; if we are only going to get rid of ninety per cent of our output, we must sell at \$2.02 a square foot; eighty per cent of our output, \$2.28; seventy per cent of our output, \$2.60. Of course, it is understood that these prices bring the average rate for the whole building, from basement to roof, to the aforesaid mentioned figure. Naturally, the top floor and the cigar stand are not sold at the same rate. I believe that to become the best sooth-sayer, one must become the best student of history. For a period of years we never sell more than ninety per cent of our output, hence selling prices must be gauged upon this deduction.

I find on possessing a fifteen dollar a square foot building, the manufacturing cost before profit would be \$1.63. If we sell our entire output to make ten per cent on our capital, we must sell at \$2.38 a square foot; if we are only going to get rid of ninety per cent of our output, we must sell at \$2.65 a square foot; eighty per cent of our output, \$2.98, seventy per cent of our output, \$3.40.

I find on possessing a twenty dollar a square foot building, the manufacturing cost before profit would be \$1.94. If we sell our entire output to make ten per cent on our capital, we must sell at \$2.94 a square foot; if we are only going to get rid of ninety per cent of our output, we must sell at \$3.26 a square foot; eighty per cent of our output, \$3.68; seventy per cent of our output, \$4.20.

I find on possessing a twenty-five dollar a square foot building, the manufacturing cost before profit would be \$2.25. If we sell our entire output to make ten per cent on our capital, we must sell at \$3.50 per square foot; if we are only going to get rid of ninety per cent of our output, we must sell at \$3.89 a square foot; eighty per cent of our output, \$4.38; seventy per cent of our output, \$5.00 a square foot.

I find on possessing a thirty dollar a square foot building, the manufacturing cost before profit would be \$2.56. If we sell our entire output to make ten per cent on our capital, we must sell at \$4.06 a square foot; if we are only going to get rid of ninety per cent of our output, we must sell at \$4.51 a square foot; eighty per cent of our output, \$5.08 a square foot; seventy per cent of our output, \$5.80 a square foot.

I might say here that the Woolworth, Equitable, Singer, Empire and Trinity Buildings are assessed at twenty-five dollars a net rentable square foot. The city, by an entirely different

method, have determined this value, and perhaps a fair one, for the public should not be charged or compelled to pay a profit on over cost of production, due to the whims of architects recently having returned from motor trips through the British Isles or the European continent, designing for us buildings following out the idea of the Chicago Tribune who have put up a competitive prize because they desire a home of enduring beauty, nor should office buildings be built at all for commercial purposes unless the plans have been approved by an experienced building manager.

I have carried these figures out on buildings costing as high as thirty dollars a square foot. Beyond thirty dollars, we had better not go, or all of us who manage same will want to change jobs with the other fellow. Buildings beyond thirty dollars a square foot, are liable to earn on their capital investment the same rate as shipping board boats that were sold during the war at two hundred dollars a ton, competing with boats costing fifty dollars a ton, traveling to the same ports, and getting the same rates for carrying freight; and the manager of this type of building cannot be expected, irrespective of his ability and energy to produce the same results as a man marketing the space of a fifteen dollar a square foot building. The twenty-five dollar buildings I have just referred to, it so happens, have recently been marketing their space at approximately five dollars a square foot. Other buildings costing as low as fifteen dollars, have been securing the same rate, and others costing as high as thirty dollars, have secured no more. In fact, I know of two buildings in the financial district, no more than one hundred yards apart, as the crow flies, and that is sometimes a long distance in New York, one costing fourteen and the other forty dollars, both supply space to the public at the same rate per annum. It is easy to understand that one of these buildings is an artistic success, and the other, as it were, at the box office. This system is, perhaps, to some of you, so elemental as to appear academic, and to a professional operator, on a shoe string basis, perhaps entirely irrelevant. Criticism on your part will require thinking. Thought on the subject is all I ask.

We are here, most of us, in the dual capacity of factory superintendent and sales manager. We represent owners who expect us to use their equipment to manufacture goods and earn for them real profits. Our first duty is to discover the real cost to manufacture, with sufficient allowance for depreciation and obsolescence in the plant, never forgetting our dear friend "overhead," together with carrying charges during the first year of construction.

The inscription on the acropolis of an ancient Grecian city says, "Know Thyself." I say, "Know the cost to manufacture." If competition compels us to sell below cost, we must govern ourselves accordingly, and do it with our eyes open. "The wise

man is a fool who knows he is a fool." For years office buildings have been operated for the benefit of the tenants occupying them. It is mostly our own fault, we have educated them along the wrong lines, we have taught them to demand the appointments and services of our luxurious hotels, and permitted them to purchase the same for three per cent on our capital. We have fixed our sale prices upon hearsay, fancy and imagination. We have often been ingenious, but incapable of analysis when we became so. Buildings built for commercial purposes should no longer remain semi-eleemosynary institutions.

I thank you.

LOUIS T. CLARK, Los Angeles: I wish to state I came from Los Angeles. If I do not hear anything further in the convention, I feel very well repaid for listening to the remarks. (Applause.)

ALBERT KERN, Detroit: I think it would be very interesting if Mr. Scott would give us the items of expense he uses in making up the cost. I believe there is quite a little difference of opinion there.

Table presented by Mr. Scott was exhibited. This is shown (in condensed form) on page 59.

MR. SCOTT: I have taken the assessment at 80 per cent. You will be taxed about 80 per cent of what your property is worth. I have taken a mortgage of 50 per cent. The operating expense we have taken at 70 cents a square foot. For mortgage interest I have allowed five per cent; amortization, three per cent. Then I am figuring we are entitled to 10 per cent on our equity. Due to the late war, our properties will average 10 per cent. You do not need to read the ouija board. The man who studies his history will make the best soothsayer. We are getting 10 per cent temporarily, and by propaganda we must get before the public production costs. They have no conception of what it costs to produce space. We are selling tickets at the door on hearsay, imagination and fancy. There are more buildings to come. We can't hold them back.

We can handle the obsolescence by amortization. All our mortgages we amortize, and it works down at the same proposition as if we took one and one-half per cent depreciation off the building. Originally we did not depreciate our buildings. We were told the appreciation of the land would take care of the depreciation of the building. We buried the land with concrete and stone and brick, and had no appreciation. The mortgage people now have made us buy our own property back. (Laughter.) The insurance is all in here. We figure on selling 90 per cent of our output. We do not figure on a building 100 per cent full.

MR. BALLARD: Perhaps you can give us a little information in regard to the market on building costs? Take any particular type of office building you like today, what percentage of cost

ESTIMATED MANUFACTURING COST PER SQUARE FOOT PER ANNUM FOR OFFICE BUILDING SPACE,
 NEW YORK CITY FOR YEAR 1922, BASED UPON SQUARE FOOT PRODUCTION COST AT VARIOUS
 RATES COMPILED FROM OWNERSHIP OF COMPLETED PRODUCTION, SQUARE FOOT BASIS.

SQUARE FOOT = NET RENTABLE SQUARE FOOT (Including Cost of Land).

	\$10.00	\$15.00	\$20.00	\$25.00	\$30.00	\$40.00
Cost						
Assessment—80% of Cost	\$1,000,000	1,500,000	2,000,000	2,500,000	3,000,000	4,000,000
Mortgage—50% of Cost	800,000	1,200,000	1,600,000	2,000,000	2,400,000	3,200,000
	500,000	750,000	1,000,000	1,250,000	1,500,000	2,000,000
Operating expense at 70c per sq. ft.	70,000	70,000	70,000	70,000	70,000	70,000
Taxes @ \$2.75	22,000	33,000	44,000	55,000	66,000	88,000
Mortgage Interest 5%	25,000	37,500	50,000	62,500	75,000	100,000
3% Amortization on Mortgage	15,000	22,500	30,000	37,500	45,000	60,000
Manufacturing Cost before profit	132,000	163,000	194,000	225,000	256,000	318,000
Rate per Square Foot	\$1.32	\$1.63	\$1.94	\$2.25	\$2.56	\$3.18
10% on Capital	50,000	75,000	100,000	125,000	150,000	200,000
Total	\$182,000	238,000	294,000	350,000	406,000	518,000
Sale Price Per Square Foot to Secure 10% on Capital:						
100% output	\$1.82	\$2.38	\$2.94	\$3.50	\$4.06	\$5.18
90% output	2.02	2.65	3.26	3.89	4.51	5.76
80% output	2.28	2.98	3.68	4.38	5.08	6.48
70% output	2.60	3.40	4.20	5.00	5.80	7.40

NOTE:

100,000 square feet used as basis for compiling this report. If building is 200,000, double the amount in all cases.

between that same building erected today and five or ten years ago?

MR. SCOTT: These same figures I have here, producing today a square foot of office space, is costing 41 per cent more than ten years ago. Labor is up 100 per cent; coal, 100 per cent, and a lot of other things; but the big items keep it down, so we figure it is costing only 41 per cent more to open the doors this morning than in 1912. Did you mean on actual square foot cost?

MR. BALLARD: That is what I have in mind.

MR. SCOTT: A building built during the war that cost \$1.25 per cubic foot, there is no way of telling what you can build it for now. Some of the professional operators are building lofts in New York now. When a man rents a whole floor he is given a key to the floor. It will cost a firm like that probably from two to eight dollars a square foot to subdivide its own space. That is one of the sweetest things passed on to the industrial corporations. A great many are paying 100 per cent on coal. Our coal bills have disappeared. Those in New York who get the tenant to pay for electric light—that went over with no trouble at all. Electric light will pay you in buildings the more you sell—sometimes as high as eight and ten cents a square foot. If you want to, put it in as extra rents. We do not want to do that. If we can get rents the way we do on selling electric current—that was the nicest thing that ever hit New York City.

ANDREW JOHNSTONE, Philadelphia: You were speaking of the operating cost being 70 cents per square foot. Does that refer to rentable or total area?

MR. SCOTT: Net rentable. That 70 cents is probably lower or higher one way or the other. We get a break of 10 cents a square foot on selling electric current.

ALFRED C. KENNEDY, Omaha: Do you include in the 70 cents taxes and insurance?

MR. SCOTT: Taxes, no; insurance, yes. I have no figures on taxes per square foot. For a building of 100,000 square feet, the taxes would run \$22,000.

MR. KENNEDY: That brings the cost close to our average in Omaha. It is around a dollar, including taxes and insurance.

MR. SCOTT: I do not suggest this as anything except for ideas.

THE CHAIRMAN: I want to thank Mr. Scott sincerely in behalf of the Association. His address was not only instructive, but entertaining and interesting. (Applause.)

Adjournment was then declared until three o'clock.

Tuesday Afternoon Session

JUNE 20, 1922.

The Tuesday afternoon session was called to order at three o'clock, with Dean Vincent, of Portland, in the chair.

ISAAC T. COOK, St. Louis: I was talking to some of the gentlemen this morning with reference to a subject which it seems to me should be carefully thought out. It came in connection with the two excellent papers rendered this morning. I am fully in accord with the idea to discourage building when it is not needed and the idea of sending out propaganda to banks and other financial channels. But it should be handled carefully for the reason if he become too one-sided and give too much publicity to the fact that office buildings are only returning 3 or 4 per cent, or less, it will have a very depressing effect on the real estate market.

I want to make a suggestion which I should like to have our officers and board of directors consider: that when this propaganda is sent out, it should be done in a manner which would not leave the impression that office buildings—or other buildings, for that matter—will continue to be a poor investment. I think it will be well to give that question much thought before any propaganda is sent out, but I believe the propaganda should go out. (Applause).

CHAIRMAN VINCENT: I presume there is no one thing we building owners and managers know as little about as chemistry. If what I know about it were put in your eye, there would be plenty of room left.

I take pleasure in presenting Mr. A. E. Horn, a chemist well qualified to present this subject. (Applause).

The Chemistry of Building Management

Mr. A. E. Horn, Long Island City

I regretted very much the introduction of Mr. Coley the other day when he said I would be able to answer any question. My



knowledge is not as broad as that; but a knowledge of chemistry has proved valuable in so many fields of endeavor, I regard it as the Intelligence Department of Commerce. The chemist can present this information to you to act upon as you see fit.

Chemistry is an intelligent art. It has gradually become probably the most exact science we have today. It originated from the study of alchemy—the transmutation of the baser into the rarer metals. Today the chemist is attempting to regulate knowledge to such a degree as to prevent people with base materials converting them into gold.

Just where to begin this subject in the interest of building management is difficult. It seems to me I might begin with the entrance of water into the building—the entrance of water into the boiler plant. Water in general is secured from three main sources: lakes, rivers and wells of different depths. Why does the building manager have to examine the water and have some knowledge of its chemistry? Because he uses it to make steam. He uses it to clean and to drink. The precaution of water analysis may prove a solution for a boiler, a cleaning or a laundering difficulty. The operation of a boiler free from boiler scale results in added safety, economy of fuel, saving of labor and durability. There are innumerable compounds sold and methods used for the prevention of so-called “boiler scale.” The boiler is made a precipitation tank for the precipitation of compounds, when its real purpose is the production and storage of steam. The method that the building owner is most generally brought into contact with is the treatment of water with boiler compound. A great number of these materials are given fancy names. The majority of such compounds consist either of soda ash, caustic soda, trisodium phosphate, sodium fluoride, tannine, gelatinous or starchy materials, or some solution or intermixture of these various materials. They are introduced and make the water soft. They prevent incrustation of the mineral salts on the interior of the boiler.

Before you buy a boiler compound, it would be my advice to have an analysis made of the water. The indiscriminate use of boiler compounds is harmful. Have an analysis of the water made and submit it to some chemist and let him designate the exact method and material that should be used.

There is another characteristic about water with reference to its use for steam formation, i. e., its corrosive action. We will find in water coming into a building carbonic acid gas, chlorides of magnesium or calcium, and occluded or entrapped oxygen. The fear the building manager has of water that contains the above mentioned minerals is that they cause corrosion, particularly when the water is hot. You will find corrosion setting in your hot water systems, your steel boiler tubes or brass seated valves. This can be controlled chemically and neutralized by the action of alkali, depending on the salts present. Those are precautions you must take so far as the water is concerned.

THE QUESTION OF FUEL

The next subject that is probably of some interest is the question of fuel. I hesitate about going into this, because I understand you have somebody to discuss this subject in detail. We are interested in what fuel contains. Carbon is the greatest heat-producing element. We have the presence of hydrogen, which is valuable; but since it produces water which must be evaporated, too much hydrogen is not desirable. The presence of oxygen is not desirable. It is generally combined with so many other elements, and it only burns when we can get the oxygen of the air to combine with material matter. We have the presence of sulphur, which is of decided value. It gives a large number of calories, but generally in the formation in which we find it, it is not valuable. We find it in conjunction with gypsum or organic matter, under which circumstances it is not desirable. Of course the analysis of coal will reveal the percentage of ash and other mineral constituents, and the percentage of moisture. In short, fuel analysis will at least determine the relationship of price paid for heat or fuel value received.

In case you have liquid fuels not subject readily to analysis, colorimetry can determine the number of heat units and the heat value of the fuel oils that will be used.

INSULATORS

The next material is the pipe covering used to insulate the heat going through the building. These are generally composed of a mixture of asbestos and hydrated basic magnesium carbonate. In buying pipe covering, generally it will be diluted with materials which are not good insulators. They are loaded sometimes with silica, sand, or barytes (barium sulphate) so that an analysis of the pipe covering is wise. I have looked at a large number of the asbestos materials used to cement boilers. They are worth

about 2 cents a pound from the mine. There is sufficient cementing material in the asbestos so that you can just add water and apply over wire mesh. It makes one of the best insulators around your boilers.

There are a large number of compounds for brick insulation to prevent the infiltration of air into your brick settings. These are largely composed of coal tar intermixed with asbestos fibre. I have seen them sold from ten to twenty cents a pound, and their actual value does not exceed four cents. They consist of dehydrated coal tar, which is worth from eight to fourteen cents a gallon, and short-fibered asbestos which is waste product from the mines where the long-fibered asbestos is used for other purposes. You can make a mixture and insulate your boiler settings at a very low cost, and get the most effective material. There is little adulteration other than the heavy compounds used to make additional weight. Sand is usually the adulterant.

RUBBER

In the purchase of your rubber goods, hose, etc., the chemist is of some value. You want to know how much pure rubber you are paying for. The adulterants are fatty substances and sulphur compounds of asphalt which will destroy the life of the rubber. You can so specify your materials as to get exactly what you are paying for.

ADULTERANTS

I am stressing the adulteration possible in most of the materials that go into conservation, decoration and construction. It is done to such a tremendous degree, due in some measure to unscrupulous competition, and is being counteracted by the American Society of Testing Materials, and other associations. They have organized technical committees composed of an equal number of technical men and consumers, headed by a technical chairman. Investigations are carried on over a long period of years in order to determine the best possible specifications without regard to trade names. These are put in the hands of the purchasing agents, and are a measure for purchasing on the basis of real and true value.

A RECOMMENDATION

If there is any recommendation I would make to this Association, it would be to organize on just such a basis of co-operation with the representatives of some of the producers and technical men not interested in producing, using or selling the material. Reports of such committees, each for the different product used, would be a basis on which the individual members may base their purchases.

LUBRICATING OILS

The next material that is of interest are lubricating oils and greases. I suggest you get from the Bureau of Mines the specification for petroleum products. There is an accurate specification for every lubricating oil for every purpose you can think of. There has been so much adulteration of every kind and so many claims made for a general utility lubricant that can answer every available purpose, you should be extremely careful.

Have any of you ever noticed the government's bids based on specifications and attempted to get a market price on the same material? You will find a difference in the price paid of twenty to thirty per cent. The government with the aid of the Bureau of Chemistry will examine carefully all materials and specify exactly what it wants. It will get what it wants, and it will pay considerably less for it.

One of the adulterants I found in greases was the introduction of two per cent aluminum stearate to a light paraffin which brought up the viscosity of the oil to such a degree that a good engineer will be fooled by it.

POLISHES

The question of polishes comes up. If there is anything to which there is a lot of buncombe attached, it is the sale of polish. I have seen them sold from one to ten dollars a gallon. The principles behind polishing are extremely simple. The file is the simplest polish we have. Practically all polishes function by the action of an abrasive of some kind, whether it is sand or rotten stone; mixed with it is generally a cleansing agent which may take the form of a solvent such as turpentine, gasoline, benzine or some of the alcohols. Generally to that is added a little soap in order to remove some of the grease, and a fractional proportion of an essential oil such as sassafras, lemon oil, etc., to disguise the odor. When all is said and done, that is what the composition of those materials will result in—a polish. The largest constituent of most of the furniture polishes I have examined has been paraffine oil. Sometimes they are diluted with benzine and a trifle of linseed oil. Before you pay a high price for it, it should be submitted to a laboratory, and you can save considerable money.

METALS

The question of metals I hesitate to discuss just because it is a very broad subject. We know we can get steels that will not corrode rapidly. We know we can alloy our steels with copper or other metals depending on the use to which the metal is put. You use brasses that range from a ninety and ten mixture of copper and zinc to a forty-five and fifty-five mixture. You should know what you are paying for and the specific use to which you

will put your brass. You should know its composition in order to pay the proportionate amount for either copper or zinc.

There are the bearing metals, the usual product being the Babbitt metal. Then we have the fusible metals which you might use for fire prevention purposes where you want to set off an alarm or fire extinguisher. There are some metals with a low melting point such as a Newton or Wood metal. We pay on the basis of its composition. Wood's alloy is composed of bismuth, tin, lead and cadmium.

REFRIGERATION

Refrigeration is the next thing. There is not much you can do except in the purchase of your lime chloride. The danger in buying calcium chloride is the acid impurities that may be present. This can be eliminated by putting in a little caustic lime in the brine tank in an open container so that it can make the entire solution alkaline.

In the purchase of ammonia, you buy it on the basis of its nitrogen content.

SOAPS

We come to soaps. Soaps are made from oils or fats, and caustic materials. The only difference between an oil and a fat is the question of temperature. Coconut oil is a fat in temperate climates and an oil in the torrid zone. A fat is composed of two things, glycerine and fat acids. We take caustic materials like caustic soda, caustic potash or lime and mix the two together. A saponification takes place which produces the soap.

There has been little real improvement in the soap industry in two thousand years. The earliest record we have of a soap factory was in Pompeii where they made soap from goat's fat and the ashes resulting from burning the wood under their pots. That is where the word "potash" comes from. They made a good soap. We have not improved on its manufacture to a very large degree up to the present time. We have pumped air into it and made it float. You are paying for air when you buy a soap that floats. (Laughter). They have medicated it and colored it to suit the expensive habits of our women folks. They have mixed abrasive materials with it to make it weigh heavier. They have increased the percentage of water. The average liquid soap contains eighteen per cent of soap and about three per cent of alcohol.

Various soaps have various values, but not for the building manager. He does not have to buy coconut oil soap. That is good for shaving. They mix a little gum tragacanth or gum arabic with that to make the lather remain on the face longer.

The ordinary washwoman judges soap by the amount of foam it makes. That is not the best measure of it. The best

measure is the amount of fat it contains. I would not hesitate to say the best soap is worth ten cents a pound. The average woman pays from twenty-five cents to a dollar for a cake of soap because they tell her it contains a variety of marvelous qualities, including disinfecting and health-building qualities. The amount of medication introduced is so small, its true worth is hardly above the pure soap.

On the commercial value of soaps, it may interest you to know the highest percentage of fats found in toilet soaps is eighty-eight per cent.

SCOURING POWDER

I happened to find in my files specifications of the government on detergents; evidence of how it buys its powder.

The material desired is a mixture of finely powdered siliceous material and sodium carbonate (soda ash) and powdered soap. It must be free from caustic alkali and be unscented. Failure to meet the requirements will be sufficient ground for rejection. The soda ash present shall be not less than fifteen per cent and not more than twenty per cent. Free alkali calculated as sodium hydroxide (caustic soda) shall not exceed 0.1 per cent. Anhydrous soap shall not be less than five per cent and not more than ten per cent. Insoluble siliceous materials shall not be less than sixty per cent nor more than eighty per cent. Ninety per cent must pass a No. 80 screen and at least ninety-nine per cent shall pass a No. 60 screen.

This detergent meets all the requirements of the building manager for fineness, abrasive and cleansing qualities and is at the same time most economical. It is a standard that can well be adopted by you all.

PAINT

Paint is a tremendous and important item to the building manager since it decorates and protects every possible structural material. Paint is essentially composed of oil, commonly called the vehicle, pigment, and volatile materials such as turpentine or substitute turpentines. The function of the oil is to bind particles of pigment to pigment and pigment to the wall. The function of the pigments is to hide, cover and decorate. The function of the volatile materials is to make easier working of the paint. An excess of any of these materials may be harmful, and the owner is, therefore, interested in the proper proportioning and balancing of each of these constituents.

Of the oils we have practically only four commercially possible materials that we may use—linseed, china wood, soya, and fish or menhaden oils. The other oils are often exploited merely as sales arguments.

Of the pigments we have the lead in the form of either carbonate, which is the one most known, and lead sulphate which

has proven itself at least the equivalent in all qualities as the lead carbonate. Then, there are the zinc pigments, best known of which is zinc oxide. Lithophone comes under the classification of the zinc pigments, but this is used only for interior purposes, and is the whitest and most widely used pigment for this purpose. Lithophones which do not change color by the action of the sunlight are the standards of today. There are a large group of inert materials which too often are condemned, but which when used in a proportion of not more than ten per cent have a definite value.

To secure decorative effects, the colored pigments must be called into use. These include French ochres which are oxides of iron. For the brighter yellows, chromates of lead; the greens are mixtures of chromates of lead and Prussian blue; the reds which may range from the aniline dye reds to the Venetian or oxide of iron reds. These materials find their largest use in producing shades and tints in paints. The purest are in the end the cheapest as their tinctorial value depends upon their purity and fineness of grinding.

The most important consideration in paint is probably durability; and too many paint manufacturers have stressed rather unimportant details such as extraordinary whiteness in their paints, and secure prices out of proportion to their real value. All paints will in the course of time yellow, due to the fact that they contain the vegetable drying oils. These drying oils dry by absorption of oxygen from the air and form linoxyn which acts as a binder for the pigment and which has a characteristic yellow tinge. Variation in the proportion of the elements that go to make paint will be used for different materials over which paint is applied, i. e., wood, plaster, concrete or iron.

Too little consideration has been given by the building owner to the invisible side of paint, namely the side that is applied directly to the material. The destructive elements such as saltpetre and plaster or films of moisture on iron, or iron rust are as equally destructive of paint as atmospheric influences. Greater precaution should be taken to see that surfaces are properly prepared before paint is applied, and many of your paint ills will be overcome.

A large number of paint foremen for building owners have insisted on the use of pure spirits of turpentine. The turpentine substitutes, which are petroleum distillates, for paint purposes have practically every advantage possessed by turpentine except that they are one-fourth to one-fifth of the value; and so considerable saving can be made by substitution of these petroleum distillates for turpentine.

Your technical committee should have specifications drawn up similar to those issued by the government or the war department for various uses and bids which they send out.

VARNISHES

A varnish is a transparent solution which when spread upon a surface dries partly by evaporation and partly by oxidation, usually with a lustre. Its purpose is to enhance the beauty and to protect surfaces, from injury. The varnish that the building manager is generally interested in is the one known as an oil varnish, and that is generally a combination of gums, vegetable drying oils, and a small proportion of metal salts to facilitate drying. The drying oils used in ninety-five per cent of the varnish are linseed, china wood, and soya. The gums generally used are the so-called copals. Depending on the price of the varnish, they vary from kauri through the congo gums to the rosins. Rosins are now being treated with glycerine, producing what are known as the ester gums. These have considerable value in varnish making; and a varnish must not be denounced merely because it contains a rosin, as in some cases it is even more desirable than the expensive gums.

On the other hand, the gloss oils which are merely combinations of rosin and benzine have found too great a market as a substitute for architectural varnishes where price is the only question.

Varnishes might well, too, be bought on specifications, as the prices now being charged are out of proportion to the costs. During the war the U. S. Government had to produce a varnish for use on aeroplanes that had to stand the hardest possible tests. There is no varnish that had worse conditions to contend against than the varnish used on the aeroplane. The ranges of temperature were very wide within a short period of time, the varnish was called upon to stand contraction and expansion, varying degrees of humidity, sunshine and rain, air diluted with atmospheric impurities pouring from factories, and air minus its proper content of oxygen. The Government drew up a specification for a spar varnish that met all these tests. The Signal Corps bought this varnish at \$1.50 per gallon. The price speaks for itself.

MATERIALS FOR COVERING FLOORS

The next largest area that you men have to consider after walls and ceilings, are your floors. There are innumerable paints sold for the treatment of floors. Paint is not the best available material for treatment of floors. After all, the thickness of the paint film does not exceed three-one-thousandths of an inch, and you can hardly expect this film to resist the constant action of traffic. Every time the average foot thrusts itself forward in walking, there is a frictional force exerted of about forty pounds. Don't blame the paint maker because your paint does not last. If you must have decoration, you must expect to pay the penalty.

The use of Portland Cement has increased in great proportion for use on floors, and with reason, since it forms an econom-

ical and everlasting floor. The architect, very often in his original specification, calls for the inclusion of iron compounds, consisting of cast iron products, by-products from the foundry which are then ground and mixed with the top coat of the cement floor. An attempt is made to ironclad the floor. In my judgment, materials of this type should not be used, since the iron in corroding (and corrode it will), increases in volume over four times its original amount, and in so doing the expansive forces liberated break the floor film. The entire surface cannot be coated as the iron itself has no cementing action.

There are another series of compounds that are sold under all sorts of names at an extremely high price, out of proportion to their real value. These are sold in liquid form, and are composed of fluoride salts in solution of about two pounds to the gallon. These materials should sell at a maximum price of about thirty cents per pound, so that the total cost of the material should not exceed sixty cents a gallon. Prices of these materials range from \$1.50 to \$2.00 per gallon. The materials themselves are composed of magnesium fluo-silicate and have a real value in the hardening and dust-proofing of cement floors where the color of the floor is not in question, since this leaves the floor practically the same color.

The Bureau of Standards has tested series of these compounds, and I regard their report as very favorable.

There are still another series of compounds for the treatment of cement floors. These are composed of a vulcanized china wood oil. This material when applied to a floor will dust-proof it and impart a brown hue or tinge that has a decided decorative effect. This will partly combine with the cement and form lime tungates which fill the floor and even make it slightly easier to tread upon. Due to the fact that these materials are partly absorbed by the cement, they are not classified as paints. In some cases, pigment has been introduced in order to secure the decorative effect. This pigment will remain on the surface and in the course of time be worn away. The introduction of pigment is sometimes desirable, particularly after a building is erected and plaster spots which are almost impossible to remove stain the entire floor, and from a renting angle, the floors look unsightly.

Wood floors that have been kiln dried lose a proportion of the original coagulating materials that bind fibre to fibre, and the treatment of these floors by the use of a treated wood oil is effective to prevent splintering. Wood oil is regarded as being of about twenty-five per cent of gum and the remainder of oil. In the course of time, development in this particular field will eventually replace, in my judgment, the varnishing of floors.

Linoleum floors should be varnished with a good spar or floor varnish, since the constant action of washing will saponify the linseed oil of which linoleum is made, and destroy the floor.

ROOF CEMENTS

There is probably no other material in the building with which the building manager is pestered more often than roof cements. These are selling from \$1.00 to \$5.00 a gallon. I am talking about a composition for curing leaks in the roof. It is composed of coal tar with asbestos. It is given all sorts of names. There is the liquid coal tar type mixed with asbestos fibre until of a plastic consistency. If you want to walk on your roof they take asphalt and cut with benzine, and that is your roof cement. Of the four hundred companies selling that compound there are not three that will vary from that formula. Some add pine oil to give it a smell. The average man tests for the smells, and knows all about it, he thinks. Give the manufacturer a fair profit, and buy it for forty-five cents a gallon. (Laughter.)

PORTLAND CEMENT

The building manager should have a wider knowledge of the structural materials that enter his building. Take for instance Portland cement. How many of you are interested in the actual construction of your building. Those that are not should be. A wider knowledge of the use and the application of cement is necessary. A large number of the dust-proofing compounds would be unnecessary if you possessed a proper knowledge of the laying of the cement floor and if the contractor had the same knowledge.

Cement floors are composed of cement, sand, stone or gravel and water. Water in this case is an active material. By the introduction of too much water, the compressive strength of cement mortar or concrete can be varied 100 per cent. Prof. Duff Abrams, in charge of the Lewis laboratories, an association located in Chicago that promulgates information in the interest of the Associated Portland Cement Manufacturers, has conducted thousands of tests to verify this statement. When too much water is added to the cement when the floor is being laid, after trowelling is begun, the excess of water is brought to the surface with the particles of cement. This cement then sets in suspension, and when the water has evaporated, a dusty cement floor results that is subject to rapid disintegration. A broader knowledge of the application of the elementary principles of the chemistry of construction would be an extremely wise thing.

WATERPROOFING YOUR BUILDINGS

The prevention of the infiltration of moisture into a structure, both for the foundation and super-structure is of real importance. There are two well-known methods. One is known as the membrane system, and the other the integral system.

The membrane system is composed of a series of layers of felt-burlap or cotton fabric separated with asphalt or coal tar,

built up around the foundation and reinforced with a brick wall.

The integral system is composed of the introduction of materials into the cement that goes into the construction of the foundation walls, making the entire mass waterproof. The latter, in my judgment, is the superior method as the entire mass is waterproofed.

When a building, after construction, is leaking the building manager has a real task. It is with difficulty that he can dig down on the outside of his building—this sometimes is impossible. His only method of procedure is to apply a cement plaster coat on the interior, properly bonded to his wall surface. The active waterproofing agents to be mixed with this cement are lime, aluminum or ammonia soaps. These are sold under fancy trade names, but when bought under their chemical terms will not exceed ten cents per pound.

In waterproofing a super-structure and exterior of a building, compounds are called into use. I know of a very large building in New York that has spent a considerable fortune in preventing water from leaking into the building after the building was erected. The structure is mainly of terra cotta. The water found its way between the joints in the terra cotta. It was probably originally caused by the fact that the terra cotta had not been burned along the joints so that the water was too rapidly absorbed from the cement and a failure of bond resulted. Miles of joints had to be cut out. It was eventually solved by painting the sides of the joints with an asphalt, quick drying in character, driving a little oakum into the joints, and finally filling with an elastic cement composed of a china wood oil treated with sulphur mixed with asbestos fibre. The object was to make this filler non-drying in character so that the joints would remain permanently elastic, and contract or expand with the varying weather conditions.

ATTENTION TO WINDOWS

If you are not careful, you will find your heating bills mounting rapidly, unless proper precaution is taken to caulk your windows. The same elastic cement used for pointing joints proves an effective material for caulking windows. If color is desired, add a little pigment, say French ochre, to produce a buff color.

If there are any fields which I have failed to cover I should be glad to have you ask any questions regarding them. (Applause).

Question: How about disinfectants?

MR. HORN: When a thing is infected, it is full of germs. When disinfected, they are killed. An antiseptic is a material that prevents further growth. A deodorant does nothing so far as the germs are concerned. Deodorants generally have little disinfecting value. Most of them are paraffine oil and two per cent

of pine oil. There is a large group of disinfectants composed of tar acids mixed with caustic soda. Materials of this type should be bought on the basis of their co-efficient. The standard of the value of any disinfectant is carbolic acid. If three times as strong, it has a co-efficient of three. There is one material twenty times stronger than carbolic acid. You never use carbolic acid in its full strength.

The cost of disinfecting is extremely small. Many materials generally sold for disinfectants in urinals have no real disinfecting value at all. They give a characteristic odor that is usually undesirable. If you must disinfect, go over it with a real disinfectant and it will be the most effective.

FREDERICK A. BOURLAND, Peoria: I am interested in waterproofing a basement.

MR. HORN: Let us assume you have a basement that is leaking. First, thoroughly clean your wall; then make its surface mechanically irregular. Upon this depends the effectiveness of your waterproofing. Then make a mixture of one part cement and two parts sand. Trowel it on your wall, first a scratch coat not exceeding three-eighths of an inch. On top of that put your finishing coat. The total thickness of the cement mortar should not exceed an inch. The final coat is composed of the same mixture. In that cement is mixed two per cent of lime or ammonia soap.

If your cellar is always wet you have a further problem to look out for. Water will follow the path of least resistance. Your wall must be pipe drilled to allow the water to escape and then cement around the hole. This was the procedure followed in the New York Times building. They filled the openings with quick setting cement and plastered over the little hole. Under the Milwaukee River is a job cured in this manner.

T. H. LYNCH, New Orleans: In a building which is of terra cotta in a damp climate, a condition prevails underneath the window sills. The plaster moulds and the paint will come off. All joints and window sills have been coated both with gum and one of the plastic materials of which you spoke.

MR. HORN: That might indicate the presence of water from another source. Even though the exterior of the building is tight, the first place I would look for water would be your parapet wall. The driving rain storm strikes the inner face of the parapet or fire wall and finds its way between the plaster and the brick wall or finds egress between the joints in the coping down to various points in the building.

MR. LYNCH: There is no coping. The whole building was painted about a year ago and the condition still prevails. I do not know where it is.

MR. HORN: Rip off your plaster and put on a cement plaster coat containing the lime, aluminum or ammonium soaps.

Paint peeling from plaster is caused often other than by moisture. No two plasterers seem to agree as to what their plaster is composed of. Quick lime produced by calcining limestone is hydrated with water. This is mixed with sand and becomes a scratch coat on the inside of your building. The final coat is applied and is probably the cause of more paint troubles than the paint itself. No two plasterers use the same mixtures. You get a spotting of your painted wall due to the variable character of your lime plastered walls. The way to overcome this is to treat your walls first with a neutralizing solution of zinc sulphate. If they were going to paint my building, I would make sure of the fact they had treated my plastered walls with zinc sulphate to neutralize the free lime. The coat should have sufficient time to dry.

HOWARD G. BISHOP, Baltimore: What strength of zinc sulphate?

MR. HORN: I would say four pounds to a gallon of water. There are zones of varying density in the wall. In the morning a plasterer puts lots of push behind his trowel in plastering. Towards noon there is not so much push and you get zones of varying density, and you will find some spots that will require more than one treatment.

PRESIDENT COLEY: Will you talk about compounds to use in water for washing compounds?

MR. HORN: The best compound I have run across is tri-sodium phosphate. You will buy it for eighteen cents a pound. It is worth about seven. It is a material I ran across in Germany. During the war they had a lot of substitutes. They had no fats. They looked around for materials available. They followed a very sound economic principle. Instead of a fatty acid, they looked around for a weak inorganic acid. They combined their alkali with that and got a soap of tremendous cleansing value without the use of fats. Take an ounce of tri-sodium phosphate and mix it about an ounce to the gallon, and you will find a most effective cleansing agent for painted surfaces and everything in the structure. The danger lies in using too great a proportion.

RAE T. SMITH, San Francisco: It is also used for cleaning wood surfaces.

MR. HORN: A very dilute solution.

LOUIS T. CLARK, Los Angeles: Will you give a solution for cleaning marble?

MR. HORN: If there are iron rust stains, hydrofluoric acid will remove them. Otherwise, a very light abrasive or powdered soap—not a rosin soap, which would yellow up your marble. Dilute it to suit yourself. Ammonium fluoride, a salt you can dissolve and also use, is less dangerous to use. Javell water will also bleach out stains.

WILLIAM C. ZEIGLER, Pittsburgh: I would like to ask what you can recommend to clean terra cotta.

MR. HORN: If it is glazed, the use of a dilute solution of muriatic acid. The cleaning of sky lights in cities where chimneys are pouring out smoke is a similar problem. The incrustation of carbon can not be washed by the use of soap compounds. You can break it down by an abrasive or an acid. I examined a material user. I sent for it and analyzed it. It was nothing more than New Jersey sand! It is effective. It will do the work. If you will add a dilute solution of muriatic acid or a ten per cent solution of hydrochloric, as it is chemically called, it will clean most of the grime off terra cotta, if it is glazed. If unglazed, the dirt is in the pores, and almost impossible of removal.

PAUL ROBERTSON, Indianapolis: Building washers tell us there is nothing that will hurt glazed tile. Is that a fact?

MR. HORN: None of the acids should affect it.

MR. ROBERTSON: They will not discolor it?

MR. HORN: No.

EDWARD M. APPLGARTH, San Francisco: In connection with the washing of buildings, I find a great many of the cleaners use an alkali. Wherever it is used, isn't there a tendency for a sodium hydrate to be left on the wall that picks up the next bunch of soot quicker than if you had not washed it?

MR. HORN: If used in excess, when the water evaporates that is what will happen. You will leave an excess on your wall. You should exercise every care to see it is properly washed with water.

Question: What is the proper treatment of linoleum?

MR. HORN: Linoleum is made of linseed oil and ground cork. The minute you begin washing it with something strongly alkaline you are breaking down your linseed oil into a linseed oil soap so that to the floors dirt will readily adhere and will look dusty and dirty. The best thing to do with it is to put a good spar varnish on it.

Question: Can cement is used in the entrance hall of our building, and a body rubbing against it leaves a stain.

MR. HORN: It is too absorbent. Nothing can help you. If your stone had been treated with the magnesium fluo silicate I spoke of, it would have made the surface very much denser. Or if it had been treated with a solution of collodion you could have washed it off without discoloration. The stains have been absorbed by the stone and only by abrasive action can they be removed.

CHARLES E. FORSTER, New York: Can you remove water stains from limestone?

MR. HORN: Unless the water has held something in solution, water should not stain limestone. Where you no longer have a water stain, but extraneous materials have been dissolved, these will stain Bedford stones. An examination would have to be made of what the material is in order that it might be removed.

If you want to know how to remove stains, there is a book gotten out by the Laundry Owners National Association that standardizes all knowledge on the removal of stains from textiles. They apply equally to materials for building construction.

CAPTAIN W. M. MCINTYRE, Cincinnati: Isn't tri-sodium phosphate good as a boiler compound, and on marble also?

MR. HORN: Absolutely. It is a splendid all-around cleaning material, and as I stated before it is sold as a boiler compound.

EARLE SHULTZ, Chicago: Does the muriatic acid have an effect on the concrete that holds the terra cotta walls together?

MR. HORN: It will attack cement and slightly disintegrate but not to any considerable degree.

MR. SHULTZ: We cleaned the exterior of our building three years ago. It is unglazed terra cotta. Three years after that we had a great many pieces that broke up, apparently through the action of frost.

MR. HORN: You washed the surface. You should attempt to make the surface non-porous. The breaking off by frost is due to the expansion of the water after it gets into the pores. They quarry stone by putting in water, and it bursts the stone.

MR. SHULTZ: The cleaning was done in the summer time.

MR. HORN: After you cleaned, if you had treated your surface with an aluminum soap you would have filled your pores with a transparent material and absorption with consequent freezing would not have occurred. Colonel Sylvester, of West Point, took an ordinary soap and dissolved in water and brushed it on his building. Then he dissolved alum and brushed that on and a combination took place, producing a transparent exterior waterproofing that is very effective. The chemist can prepare this with material in the plant.

PRESIDENT COLEY: That would show there was a deteriorating effect of the muriatic acid on the cement coating, wouldn't it?

MR. HORN: That is the conclusion you are arriving at. I do not agree with you. The slow destructive action of infiltrating water became pronounced after a long period of time.

FRED SWETLAND, Cleveland: I agree with Mr. Shultz the use of muriatic acid is very detrimental to the breaking off the terra cotta. The cleaners use an undue quantity in their solution—so much that things smoke when they are using it. We make a practice of cleaning our buildings every year. We find the binding in the terra cotta and brick is adversely affected by the use of muriatic solution. They leave the solution there and it gradually disintegrates the Portland cement. This year we have discarded the use of muriatic acid entirely. We have used the cleaning compound which has been spoken of here. It involves more labor, but it is guaranteed not to affect adversely the Portland cement.

MR. HORN: The only comment I can make is the fault does not lie with muriatic acid. It lies with the labor element. You are using too strong a solution.

MR. ROBERTSON: Will muriatic acid wash off with water if a hose is used?

MR. HORN: Yes, sir. With muriatic acid particularly diluted it will all wash off as also the by-products of its action.

PETER GRIMM, New York: Do you recommend cleaning by sand blast?

MR. HORN: I have not been able to arrive at any conclusion. There is an investigation being made by our government on the preservation of stone. The report is not completed. The Indiana Limestone Association does not recommend cleaning by sand blast.

CAPTAIN MCINTYRE: I investigated the sand blast and the information I found was when a stone is taken out of the quarry and shaped up for your building, it had sufficient time to dry the surface. The dry surface would be harder. If you sand blast it, the surface is broken and more subject to grease and dirt and atmospheric changes than otherwise.

MR. HORN: A building in Albany was treated with the sand blast and the state mineralogist thought it a mistake.

MR. APPLEGARTH: Is graphite a good thing to use as a boiler compound?

MR. HORN: Yes; it mechanically entraps the suspended particles and is sometimes used. I prefer a chemical reagent that will precipitate the materials.

MR. APPLEGARTH: There was an article by a member of the United States government condemning it on account of the fact it was destructive to boilers.

MR. HORN: It is apt to set up corrosion.

MR. ZEIGLER: What is your opinion on diluted formaldehyde for disinfecting purposes?

MR. HORN: The Department of Agriculture, Farmers Bulletin No. 926, recommends the use of formaldehyde in conjunction with permanganate of potash, which generates a gas which is the effective agent. It will penetrate all crevices. It is valuable because the formaldehyde gas will not stain anything. Write for the booklet, "Common Disinfectants and Their Uses." You will have an excellent discussion simply stated. There is hardly a subject on which you cannot get information if you will only seek it. Practically every governmental agency has much material of value for everybody. The Bureau of Standards has done a great deal of work in standardizing and analyzing materials and making the proper recommendation.

B. M. MARCON, Chicago: In eliminating iron rust from marble, would a strong solution of hydrofluoric acid tend to discolor the marble?

MR. HORN: It should not. Use as a solution and brush it

over the surface. You would probably have to make a number of applications. It can be removed.

JAMES W. BAMFORD, Pittsburgh: What would be the cost of a scouring powder made by government specifications?

MR. HORN: I think it is three and three-fourths cents.

PRESIDENT COLEY: Will you please discuss soap powders—their water content and other chemical constituents?

MR. HORN: Soap powders usually consist of powdered soap mixed with a soda ash. There is sodium carbonate which contains only two molecules of water, and sodium carbonate (washing soda) which contains ten molecules of water. The soda ash is naturally the more economical. The soap powders are mixtures of ten per cent sodium carbonate and ten per cent soap powder, and the rest siliceous materials—finely divided sand.

V. A. SWAIN, Indianapolis: What would you suggest to use on an elevator on the cable, where there is dampness in the shaft, to prevent rust?

MR. HORN: Generally a neutral vaseline that will wipe off readily and prevent attack by water.

J. A. DICKINSON, Bureau of Standards, Washington, D. C.: I might suggest linseed oil, which is recommended by cable and elevator people. It has the advantage of forming a transparent film that will not interfere with the expansion of the cables. Any graphite substance will interfere with the proper expansion of the cables. It will actually interfere with locating broken wires. Your boiled linseed oil will oxidize and give a nice finish and soak into the hemp cord. It will ooze out and keep it nicely lubricated.

COLONEL GORDON STRONG, Chicago: What is the best paint for protecting exterior iron work?

MR. HORN: According to the tests by the Paint Manufacturers Association, the priming coat should consist of red lead, or a paint containing a large percentage of chromates. All pigments are in three classes: those that inhibit the rusting of iron; those that accelerate it, and those practically inert. Red lead ranks ten, with a standard of ten. Lead chromate ranks ten. That used in conjunction with linseed oil is the priming coat. For the final coat, use about sixty per cent of pigment and forty per cent of vehicle, which should be a mixture of boiled oil, meeting the specifications of the American Society of Testing Materials, raw linseed oil, with a small percentage of Japan drier—the pigment to consist of a mixture of zinc oxide, basic carbonate of lead, and about ten per cent magnesium silicate. That today is worth about \$1.50 a gallon.

PRESIDENT COLEY: Do you have much trouble with the lead in the bottom of the can? You hear about liquid red lead, where the lead will stay in suspension.

MR. HORN: It is composed of magnesium silicate—lead diluted with asbestine. The specific gravity of red lead is about

seventy-three pounds to the gallon; of magnesium silicate, about twenty-three to the gallon. You are buying an inert worth very much less. You are not getting as much red lead as if you buy it straight, but it helps suspend the red lead.

PRESIDENT COLEY: You are not obtaining the same protective surface. Magnesium silicate has no protective qualities.

MR. HORN: No. A small percentage of magnesium is all right. Beyond ten per cent it is an adulterant.

MR. LYNCH: What paint would you recommend for water tanks?

MR. HORN: I thought all the water tank people did not recommend the use of paint for wooden water tanks.

MR. LYNCH: This is a metal tank.

MR. HORN: There is no paint I have run across that will constantly resist the attacks of water. I would call for a paint with a wood oil varnish that will, to the largest degree, resist the action of water.

MR. LYNCH: We are afraid to use red lead for fear of poisoning.

MR. HORN: You can use a titanium oxide as a pigment or you can treat the inside of the tank with asphaltum with a gilsonite base.

THOMAS CONNALLY, Atlanta: I understood you to say to Mr. Robertson of Indianapolis none of the cleaning compounds would hurt the glazed surface of terra cotta. We have been washing Italian marble with ordinary Ivory soap. Is that better than tri-sodium phosphate, and what substances must we avoid?

MR. HORN: Any compounds that will combine with the marble. Marble is a limestone. Acid material will destroy the polish. You must avoid all chemical compounds that will combine with the marble. Limit yourself to weakly alkaline materials. Sodium phosphate is effective and won't harm the lustre. Use a little tin oxide which will bring back the lustre.

PRESIDENT COLEY: Tell us about putty.

MR. HORN: It is composed of linseed oil, which is generally adulterated, if at all, with parafine oils or petroleum distillates. Due to high labor costs great care should be exercised to buy only mixtures of lead, whiting and linseed oil for wood putty and for steel sash, a higher proportion of lead than whiting.

THE PRESIDENT: We want to thank you, Mr. Horn, for your contribution. (Applause.)

H. L. ECKERSON, New York: There is some wonderful information in this paper. I have been wondering if we could not get it published in advance?

Taxation Methods

CHAIRMAN VINCENT: Mr. Zangerle of Cleveland, county auditor of Cuyahoga county, was asked to speak to us about Taxation, and I will call on Mr. Lewis, president of the Cleveland Association, to read a letter from Mr. Zangerle.

W. I. LEWIS, Cleveland: I tried to prevail upon Mr. Zangerle, our County Auditor, a man who is recognized over the country as being one of the most efficient men in that line of activity, to be here but I found there was some doubt as to his being able to do so. I know you would enjoy hearing from him on the question of Taxation. When I found he could not be present I talked to him to see whether he would not write out something to be presented to you. He said he had not made preparation, and inasmuch as I was in doubt about being able to come, Mr. Zangerle wrote a letter to Mr. Bicknell which I will read to you. (Reads):

County of Cuyahoga,
County Auditor's Office,
Cleveland, Ohio.

June 17, 1922.

Dear Mr. Bicknell:

I regret exceedingly that family matters as well as business prevent my attending the convention. Had I been able to be present, I should have stressed the growing need of a greater attention to our system of appraisals.

With local taxes mounting all over the United States and Europe, in townships, villages and cities, frequently double within two years, it is becoming increasingly important that tax values shall be equitable, not only as between properties within the local taxing unit, but also where the state rate is growing, as between properties within the state.

To secure a greater equality in this increasing burden requires greater technique in the science of assessing by the assessor, greater publicity and a greater co-operation between the assessor and the owner. It is not necessary for me to express the opinion that these results cannot be accomplished through the ordinary politician-assessor, elected every two years because of his politics. Nor can it be accomplished unless property owners in general pay more attention not only to their own assessment, but also to that of others. The assessment of our own property may be invalidated by the assessment of others.

After property-owning classes have then assured themselves of proper administration of the taxation machinery, a still greater duty devolves on them. They must educate our non-property-owning classes that they are vitally concerned in these matters, that increased tax rates and increased bond issues in the last

analysis are their burden, that waste and extravagance in public office is first paid by the property owner, then becomes overhead expense of the manufacturer, merchant and building owner and finally is laid on the consumer, home-owner and renter. The renter must begin to feel and assume his responsibility, else the good work of the assessor and your earnest co-operation will lapse into decay and desuetude.

The most important function of government is taxation. Its administration in a democracy must, therefore, be exercised directly or indirectly by political agencies. These agencies should, however, be non-partisan. They should not be elected on a partisan ballot. In this and in greater enlightenment of the electorate lies the immediate hope for more equitable taxation, respect for property rights and for our government.

If the convention has the time, it might be interested in your reading a leaflet, widely distributed to our citizens for the purpose of arousing a greater sense of public responsibility in fiscal matters.

Yours very truly,

JOHN A. ZANGERLE,
County Auditor.

The leaflet to which he refers is this one:

INFORMATION FOR ASSESSORS AND TAXPAYERS

Tax rates were *increased* by action of the Legislature.

- 1st. By imposing a state levy for educational and institutional buildings.
- 2nd. By imposing a library levy in addition to all other levies.

Tax rates were *increased* by a vote of the people,

- 1st. By voting up a rate to take care of bonds issued prior to January 20, 1920.
- 2nd. By voting up a rate for Metropolitan Parks.

Tax values were *reduced* by the County Auditor in the following cases:

All land values appraised in 1920 (which was the time of peak prices) were reduced 20 per cent. This action has reduced the aggregate duplicate in Cuyahoga county \$160,000,000. This has resulted in a saving to the taxpayers of over \$3,000,000 *for the rates would have been practically the same whether the reduction was made or not.* Especial attention is called to the saving of \$160,000 in state taxes by the Auditor's reduction.

Cleveland Tax Values—Rates

	Land	Buildings	Personal Property	Total	Rates
1910	\$ 100,000,000	\$ 101,505,120	\$ 73,465,485	\$ 274,970,605	\$ 3.48
1911	230,000,000	276,812,210	207,992,415	714,804,625	1.36
1912	230,000,000	288,552,210	238,278,975	756,831,185	1.36
1913	230,500,000	313,925,170	269,883,340	814,308,510	1.55
1914	240,500,000	323,745,260	308,140,595	872,385,855	1.51
1915	241,000,000	347,410,530	302,921,305	891,331,835	1.53
1916*	241,710,870	380,279,600	347,776,590	969,767,060	1.555
1917	400,000,000	347,785,510	450,928,050	1,198,713,560	1.555
1918	400,520,100	373,333,100	524,195,720	1,298,048,920	1.555
1919	400,735,100	393,729,220	594,586,970	1,389,051,290	1.775
1920	644,000,000	429,842,860	679,403,330	1,753,246,190	2.28
1921 Est.	500,000,000	469,000,000	631,000,000	1,600,000,000	2.46

*The tax duplicate has been practically doubled since 1915 under the administration of the present County Auditor, commencing January 1, 1916.

COST OF ASSESSING BY THE COUNTY AUDITOR

The following shows the cost of assessing property in Cuyahoga county as compared to other cities, comparing cost on a basis of each million dollars assessment, indicating that the Auditor's department is doing its bit to reduce taxes:

New York.....	\$290
Philadelphia	186
St. Louis.....	184
Baltimore	180
Detroit	127
Cleveland	60

The appropriations in our large cities (or counties) for assessment work compared with Cuyahoga county are as follows:

APPROPRIATIONS FOR ASSESSING

		Cuyahoga County
Boston	\$247,897.....	\$128,200
Baltimore	136,000.....	128,200
Detroit (Wayne Co)....	255,780.....	128,200
St. Louis.....	138,550.....	128,200
Philadelphia	381,000.....	128,200

The aggregate assessed value of property in Boston, Detroit and Philadelphia is substantially the same as that of Cleveland. Baltimore and St. Louis have a duplicate about 60 per cent that of Cleveland. It should be noted, however, that Cleveland's aggregate tax rate is lower than in the cities mentioned.

HOW TO REDUCE TAXES

Having indicated in the foregoing the ever-mounting burden

of taxes in Cuyahoga County's cities, what in general is its cause and its cure?

Public officials, accustomed to a war-time basis of income and expenditure, seem unmindful of business conditions. They do not feel the pinch as do taxpayers when their hand digs into the public till. Many minor officials consider the public exchequer inexhaustible. They feel no necessity for balancing expenditures to income. They expend in ten months what should be distributed in twelve months, suddenly realizing a deficit has been created.

It is ludicrous, however, to hear people urge a reduction of taxes on the one hand who, on the other, urge more improvements, higher salaries, more bonds, more bureaus, new departments, additional municipal activities, more school studies, aesthetic structures, more police protection, etc., etc., ad nauseam. It never occurs to such people that more expenses mean more taxes—taxes which assessing and collecting officials are compelled by law to impose and collect. Such people never inquire, "Can we afford it?" "Who is to pay for it?" "Will this increase my taxes, or rent?"

The demand of the hour is for reduction in taxes by public officials. How can the unemployed home-owner, or the losing business, pay the same tax bill in times of depression as in times of prosperity? Why should not every public official seek to curtail expenditures, give greater service for less money, take inventory of imperative needs rather than desirable luxuries, get the public business on a rock-bottom basis just as farmers, employers and business men in general are now compelled to do?

We are often asked, "What can a taxpayer do to change the situation?" First, he or she should ally himself or herself with one of the many splendid civic organizations of this county. Second, each of these civic organizations should select a delegate to an inner council. The inner council may then appoint one of their number, if not a paid secretary, to attend the proceedings of school, council and county meetings of the respective taxing districts. The primary duty of such secretary would be that of a publicity agent. He would be expected to keep every delegate informed of probable waste of money, unwise expenditures, possible economies and other useful and comparative information. The delegates of the respective organizations might then keep their own clubs informed as to the financial and social condition of the city. Such secretary ought to function in the nature of a bureau of information, a bureau of complaints or suggestions, a clearing house for citizens' advice, which would help greatly to stimulate inquiry and change. The people of Cleveland, each and every one, ought to appoint himself or herself a committee of one inspecting public work and reporting omissions of duty, inefficiency, waste, etc., etc., as the same now frequently occurs to everyone with no one interested in such observation, advice or report.

At present public business is nobody's business or rather that of profiting contractors. It involves too great energy and time for any single organization to watch and read all public proceedings. This work should be done jointly with widest diffusion to interested organizations. Until some such organization is effected, some such finger kept on the pulse of public spenders,—the present mad pace for spending may be expected to continue.

Third, When bonds or additional rates are up for popular approval, it works a wholesome influence on your representatives to vote them down, unless they represent absolute needs. It is a fine thing to build new, perhaps ornamental public buildings, just as we all would build a new home. Why not ask, in public as well as private life, "Can we afford it?" "Is it necessary?" "How do we compare with other cities in development, activity and expenditures?" Cincinnati in November, 1921, voted down a proposed rate for municipal and a proposed rate for school purposes. I have no doubt great economies will now ensue in that city.

Fourth, Renters must assume a greater share of responsibility. Many do not vote on questions of finance. Others vote most freely for grandiose improvements and increased rates of taxation, content that such action will not affect them. Until these renters, half the population of Cleveland, recognize that they pay the \$1,000,000 and more of taxes and rent of our large department stores, the \$1,082,000 taxes of the street railway company, the \$1,400,000 taxes of the Cleveland Electric Illuminating Company and the \$1,209,000 taxes of the East Ohio Gas Company—until they recognize that they are the real taxpayers of taxpayers—no permanent relief may be expected. A greater knowledge as to who bears taxes rather than who pays them, greater knowledge as to what costs enter into price—every price—would help more than any other factor in reducing expenditures.

There must be a closer touch between the public official and the public. The incompetent official requires overseeing, the competent must be rewarded with appreciation. Indifference to public expenditure is the keystone to waste, graft, debauchery of public life. Knowledge, intimate knowledge of public activities, and assumption of the responsibility, a pause in our private activities and surrender of our time to the cause of the public—these are the price of democracy.

JOHN A. ZANGERLE,
County Auditor.

THE CHAIRMAN: I thank you very much.

After an announcement by Mr. E. M. Horine, of Atlanta, as to a Southern Conference, and by Mr. Sayer with regard to the meeting of Associated Secretaries, adjournment was declared.

Tuesday Evening Session

June 20, 1922.

The Tuesday evening session was called to order at eight o'clock, with the First Vice-President, Dean Vincent, of Portland, in the Chair.

Mr. Vincent called on Mr. H. G. Bishop, of the Lexington Building, and Secretary of the Building Owners and Managers' Association of Baltimore to introduce Mr. Dickinson.

Mr. Bishop, in introducing Mr. Dickinson, reviewed the new Elevator Code of Baltimore and told of the assistance which had been extended by the Bureau of Standards for the preparation of a satisfactory code. As this law was enacted under the leadership of the Building Owners and Managers' Association the review of the legislation was of special interest. The printed report distributed by Mr. Bishop is given in full in Appendix I. of the Proceedings.

Elevator Codes

By J. A. Dickinson, Mechanical Engineer U. S. Bureau of Standards, Washington, D. C.



There is perhaps no better criterion of the civilization of a people than the state of development of its transportation systems. The savage depended on his dugout and perhaps a half-tamed horse. Gradually the dugout developed sails and grew in size until it became a basic means of long-distance transportation. The horse was trained to pull a wagon, or other animals specially fitted by nature were caught and trained. Eventually animal power was replaced by steam and distances once measured in days were traversed in hours. Steam likewise gave an impetus to shipping; no

longer were mariners compelled to wait on the whims of the wind; they might go anywhere on the Seven Seas at their pleasure. The world's horizons were contracting—travel became common. The introduction of electric power fixed new means of urban and interurban transportation. The internal-combustion engine opened the way for the millions of automobiles that now travel our highways and showed the way for the airplane and dirigible balloon.

As cities became larger and the ground in business districts became more valuable, the height of buildings showed a perfectly natural tendency to increase. It soon became obvious that unless some means of transporting passengers quickly and safely from the ground floor to the upper floors of such buildings was developed, the heights of buildings would be limited by the number of flights of stairs which could be climbed by the average person without undue exertion,—some four or five floors at best. It must not be imagined that the idea of vertical transportation was entirely new—in fact the pyramids of Egypt and the palaces of Rome show vertical openings connecting different floor levels and the stone thresholds show grooves cut by ropes with which these first elevators were lifted. The flying chairs developed during the time of the late Bourbon kings and the first Empire were old adaptations of the one-man lift idea. It was not until 1850, however, that the elevator was really developed in anything like the form that we know. It may be of interest to note that the earliest elevators used in this country were actuated by a long screw shaft, a nut being fastened on the under side of the plat-

form. These early elevators gave way to the steam elevator which in turn was supplanted by the hydraulic machine. This type became exceedingly popular and was developed for high lifts and high speeds.

The development of the electric motor offered a new motive power for elevators, but when first introduced it had so many inherent defects that it made but slow progress. Gradually, however, as the electric motor was improved, its use for driving elevator machinery became more common. In the late 90's it was more than holding its own with hydraulic installations and has continued to increase in use each year until now it stands pre-eminent as a motive power for elevator services.

The number of elevators in use is increasing at a rate far in excess of that of any other means of transportation except the automobile. The modern office building, hotel or apartment is dependent entirely upon the development of the elevator. Without the high-speed, high-rise traction elevator the modern sky scraper would be impossible. Considered purely as a means of transportation the elevator has grown to the point where it handles as many passengers a day in a large city as all of the surface, underground and elevated systems combined.

Unfortunately, the elevator, in common with nearly all other forms of transportation, has taken and continues to take its toll of human life. In the earlier days when car-holding safety devices were far less perfect and when much lower factors of safety were used for the cables, accidents due to the breaking of cables and the dropping of the car were only too common. Today this class of accident is a very small part of the total fatal and serious accidents occurring on the elevators of the United States. Strangely enough the public does not realize this fact and in the mind of the average passenger the thing most to be feared about the elevator is the failure of the cables, with a consequent dropping of the car.

As is the case with electric railway accident, the bulk of the serious and fatal accidents to passengers on elevators are not caused by the spectacular crashes involving a large number of persons, but by the accidents occurring singly to individuals, generally while boarding or leaving the car or elevator. It has been for generations a habit of many people to swing on or off a train or trolley car while in motion. Recently, however, the introduction of vestibule doors has done much to discourage this practice. Bad as this habit is on steam or electric lines, it is far more hazardous to attempt to board a moving elevator because the cab and the landing of the top of a hoistway door frame form a shear which, if the person is caught, will almost invariably result in a very severe if not fatal accident. Unfortunately it is an all too common habit for an operator to start his car before the doors are fully closed. It is but natural for a person in a hurry to try to enter a car after the doors have started to close and the

elevator has commenced to move. This probably is the greatest single cause of accidents on elevators today. In fact almost three-fourths of all the serious and fatal elevator accidents occurring in the United States occur at the hoistway door.

Strangely enough these hoistway-door accidents are almost equally divided between those classified as "crushed by car" and "falling down the hoistway." Many of the latter classification, however, are attributable to the motion of the car. Frequently it happens that persons in trying to board or leave the car are so thrown off their balance that they fall down the open hoistway after the car has passed. This hoistway door hazard was recognized many years ago and it was but natural that some attempts should have been made to eliminate the hazards by means of a device which would prevent the movement of the car while the door was open and would hold locked the door when the car was not opposite the landing. Several such devices were produced twenty years ago. Since that time there has been a large number of such devices developed and placed on the market, some good, some fair and others that are practically worthless.

Legislation requiring the use of interlocking devices is not new. The City of Philadelphia has required interlocks for a number of years and the statistics on elevator accidents from that City show that the compulsory use of such devices has gone far toward eliminating serious and fatal accidents. The States of Pennsylvania, New Jersey and New York (exclusive of New York City) at the present time require their use, and there are several states and a number of cities which are considering such laws at present. Such legislation in itself is desirable provided the code is modern and takes into consideration various types of mechanism for accomplishing the desired results. Unfortunately several city ordinances have been inspired by manufacturers' representatives and permit only one type of interlock. Such legislation is not only unfair to other manufacturers, but has a further tendency to raise the cost of such installations to building owners; here, as in almost any other line of manufacturing, real competition tends to keep prices down.

The elevator code prepared by the American Society of Mechanical Engineers with the co-operation of the Bureau of Standards, a number of manufacturers associations and insurance interests was undertaken in answer to the urgent demand for a modern uniform code that would be generally acceptable to those most concerned and would afford the maximum protection to the public. It is undoubtedly a logical and modern standard for elevators. A few of the points covered in this code may be of interest. It is, so far as the writer is aware, the only elevator code which has ever been prepared which does not limit the speed of elevators for passenger service. Many of the existing regulations in various cities in the United States are actually handicapping the modern building owner by imposing speed limits which

in themselves offer no real safety. As a matter of fact the elevator of modern construction, if equipped with the proper safety devices, is as safe at the speed of 750 feet per minute or even 900 feet per minute as one running 450 or 500 feet. The unpleasant sensations experienced in some high-speed elevators is due primarily to the rapid acceleration and retardation and not to the free running speed. The analogy of a railroad train may be interesting. If the locomotive engineer starts the train very quickly, very unpleasant jerks are felt in the car—a quick stop has a tendency to throw one forward in the seat, while if the train is running at a uniform speed, even though that speed be high, no unpleasant affects are noticed. The same conditions hold true in elevator service.

The A. S. M. E. Code does set forth the allowable retardation under the action of car brakes, safety devices and terminal buffers, as these are the features which are responsible for many of the unpleasant sensations and even some accidents. The usual limits of speed, capacity and rise of button-control elevators have purposely been omitted, as it is very probable that within the next decade tremendous advances will be made in the button-control car. In fact there is an installation of elevators of this type now being made in New York City where the elevators have a free running speed of 600 feet per minute.

Another rather novel and decidedly valuable innovation made in the A. S. M. E. Code is the requirement for factor-of-safety elevator cables. Nearly all laws prepared heretofore have required a fixed factor of safety, perhaps slightly higher for passengers than for freight, but not taking into account the car speed. As a matter of fact, the effects of impact and acceleration in a cable may add 50 per cent. or more to the ordinary dead-weight load. Naturally in the case of high-speed cars with their higher accelerations these strains are more severe than on low-speed cars. Then too, the wear on such cables is greater. Logically the high-speed installation should have a higher factor of safety as based on dead or static loads than low-speed machines. This has been taken care of in the A. S. M. E. Code by giving the factor of safety for elevator cables in the form of a curve so plotted that high-speed machines are required to show a much higher factor of safety on their cables than those of low or moderate speeds.

With regard to interlocking requirements, the code lays down certain fundamentals governing the operation of this device, but does not discriminate between the various types of equipment.

These are only a few of the points covered by this code but they have been chosen for particular emphasis because they are points in which this code is radically different from most existing regulations.

When the Bureau of Standards was asked to assist in the preparation of an elevator code for Baltimore it is natural that this A. S. M. E. Code was taken as a basis of the new ordinance.

(Only minor changes were made to adapt it to local conditions.

It is unfortunate that most of the approval lists maintained by city and state elevator inspection departments are based primarily on a visual inspection of the device submitted. Such an examination is, of course, necessary but it does not go far enough. If a device is to offer real safety it must be rugged, simple, and capable of operating continuously for long periods of time, not only under ordinary circumstances, but under decidedly adverse conditions. Most of you gentlemen know that there are certain automobiles on the market which have the reputation of being "one-year cars," cars that have not the stamina to stand up to the demands of continued service as well as certain other machines which perhaps will not give quite as striking a performance when new, but which will be kept going and give satisfactory service year after year.

In an endeavor to secure devices for the City of Baltimore which would give long and successful service the Bureau of Standards has agreed to make acceptance tests of such devices for the Inspector of Buildings. These tests will include a life function test through which, by means of a specially built machine, we can obtain the equivalent of several years' wear in a few weeks. Another test will be a test without lubricant in which the device after having been disassembled and washed in gasoline, will be re-assembled and required to perform a series of operations with no lubrication. This test may seem to be severe, but its inclusion is the result of a field survey made by Mr. C. E. Oakes and myself for the Bureau in which we found that many of the interlocks now in operation apparently were receiving absolutely no lubrication or care.

Such devices will be further required to work in an atmosphere of dust, to function in a closed compartment in which a moist atmosphere is maintained and to function when the car platform or car door is moved to a specified distance in any direction. All of these tests were drawn up as a result of conditions causing interlock failure in service which we encountered in making the survey above mentioned. Such tests, we feel, will go far toward insuring real safety devices; devices which will not only give safety when installed but will continue to give satisfactory service year after year.

As was pointed out earlier in this paper, elevator service is essentially a question of transportation. The maintenance of proper service is of vital importance and a safety device that will constantly interfere with this service is going to prove unsatisfactory and expensive in the long run no matter how low its first cost may be.

There is one question which doubtless will be of great interest to you and that is the effect of such interlocking devices on the speed of service. In connection with the work in Baltimore a number of tests were made on buildings already equipped with

interlocks. The time to make a round trip stopping at every other landing was timed, both with the interlocks working and with the interlocks out of service. It was found that the time lost varied from $5\frac{1}{2}$ to approximately 11 per cent. Such a curtailment of service particularly during the rush or peak hours doubtless appears to be rather serious. However, there is scarcely an installation in the United States where it is not possible to improve service this much in other respects. Among the points which might be mentioned are closer dispatching of cars with a correspondingly shorter lay over at the terminals; the education of tenants to watch the indicators or lamps and to walk over to the door of the elevator about to stop and to be ready to board the car; and the proper setting of brakes. It might well be mentioned in this connection that a difference of time of only one-half of a second, in the time necessary to stop the car (a variation frequently found between various elevators of the same type operating in the same bank), will result in a considerable loss of time while making the 1,000 or 1,500 stops which the average elevator makes in a business day. As a matter of experience most of the buildings which have installed interlocks have found that the service was not slowed down enough to affect them appreciably.

It might be well to point out the desirability of securing the proper interlock for a given elevator installation: One type of interlock may be perfectly satisfactory for a slow or moderate-speed machine and yet not give satisfactory service on a high-speed installation. Perhaps the safest method of approach is to require the interlock manufacturer to give the names of two or three other buildings equipped by him having cars of the same type of motive power, speed and gate equipment as the one under consideration and to inquire from the superintendent or manager of these other buildings exactly what their experience has been with the device in question on such a type of elevator installation. Unfortunately up to the present time the building owners themselves have taken but little interest in the preparations of such an ordinance and state laws except perhaps to oppose provisions of the law which appeared too drastic. The action of the local Building Owners and Managers Association in taking as prominent a part as they did in the development of the new elevator code in Baltimore marks a new step forward. There is a great field for constructive work on the part of the building owners and managers in securing laws which are modern, which will not hamper the development of the elevator art and which will require safety devices which are safety devices not alone in name, but in reality. Representing as you do the owners and managers of a large proportion of the modern buildings in many of our larger cities, you have the opportunity before you of assisting in sound constructive legislation which will ultimately mean greater safety to the entire traveling public.

PRESIDENT COLEY: In our building I have installed a

little tapper bell in connection with the up and down elevator lantern on the floor. This bell brings the passenger in front of the gate opening. In a round trip time of five and a half minutes, we cut the trip to four and three-fourths minutes by this device. The bell is so constructed in the lantern that it cannot be seen, and it is rather inexpensive—five dollars a bell-lite. I am not making this talk to advertise any article, but the bell is a fine thing where you have elevators facing each other. Unless the operator opens the door with a slam, the tenant often does not know the car is there.

J. A. DICKINSON: It bears out my statement you can speed up more through training your tenants than the total amount the interlocks will lose. Could we call on you for your experience with interlocks?

PRESIDENT COLEY: We have the electric interlock, only locking the elevator in the event of the outside or landing gate being open. The repairs to the interlocks in our building on seven hundred gate openings are about \$100 a year. We have been running about seven years and the expense on the entire interlocking equipment has not been a thousand dollars. That does not include every minute our mechanical man put on the interlock in the regular shaft work. We have a man who looks after the cleaning of shafts, adjustments of gates, etc. We did not segregate the amount of time per floor per shaft. Any new parts purchased have worked satisfactorily. I am sure it does not average two hours per day on interlocks. We have only one man, working eight hours a day, taking care of all gates.

QUESTION: In this bell system, does the bell ring before the car reaches the landing or after the gate opens?

PRESIDENT COLEY: The bell rings simultaneously with the lighting of the signal light. One bells answers for the up and down light. If your lighting system is set for two floors, it rings two floors before the elevator reaches the landing. The manufacturer is the Bell Light Company, Times Building, New York. I have also installed the device in the cab itself, where I alarm the operators hearing, as well as his sight. The bell is installed directly over the operator's head. If he gets so used to seeing that light come on that it does not particularly affect that nerve cell, he gets "an eyeopener". in the ear from the bell.

QUESTION: I would like to ask if there is any advantage of one interlock over the other?

J. A. DICKINSON: The mechanical people claim the advantage that the car must stop within a given distance of the landing. As a matter of fact, when we worked out this elevator report, we endeavored to get some statistics. We went to the largest casualty company of the United States and asked frankly what their experience in accidents had been. We got their figures for

an entire year. Over 65 per cent of the total accidents occurred when the difference of distance between the platform and landing was less than three inches—which is the range of the average mechanical interlock—the mechanical interlock would not have prevented those tripping accidents. You probably have stumbled over a flag stone raised half an inch, but you never stumble over a curb stone where the elevation is obvious. People are liable to trip where the difference is slight. If large, your eye catches it. The mechanical people must use the stepping range to get a mechanical engagement between the shaft and the car. In the case of the electro-mechanical device, if you have anything the matter with the device, you throw a switch which removes the interlocking protection from the entire shaft. As a matter of fact, the difference in service is relatively slight. We covered some seven thousand interlock landings, and the percentages are given in Technologic Paper No. 202, Bureau of Standards. You can get it from the Government printing office.

QUESTION: What was your experience in making your tests in having air thrown gates in connection with the interlock as a matter of safety?

J. A. DICKINSON: Apparently they are very popular in New York and in a number of large cities. The only difficulty with that particular combination unless your switch is carefully set, you may be making contact before the door is closed or within the action of the device which is to lock the door when four inches from the closure. If properly set, I believe it to be a satisfactory service. The mechanical door closer is undoubtedly a means of speeding up service. They are faster operating than manual operation.

QUESTION: What is the experience as to the wearing qualities of the 6-strand as against the 8-strand cable?

J. A. DICKINSON: The latter gives I believe a somewhat superior flexibility, but you must be very careful of the sheave grooves because it does not hold its shape as well as the 6-strand.

QUESTION: Does your code cover the installation of these devices on hydraulic cars?

J. A. DICKINSON: Yes. We are also requiring automatic door closers, and the provision of the Code is that the automatic door closers shall close the door either when the operator's hand is removed or when the car has moved three inches from the landing. That is the only way we see to take care of the open door hazard.

THE CHAIRMAN: We had a peculiar accident in Portland that killed an operator. Mr. Sayer can tell us how it happened. A discussion came up as to how it could have been prevented.

JAMES J. SAYER, Portland: There seemed to be two valves which the girl had to turn on, one of which should be

turned on first. She turned the second one first and caused the elevator to go into motion. In attempting to climb into the elevator and get hold of the lever, she slipped and fell.

J. A. DICKINSON: There was a fatality in Philadelphia Christmas week where a girl was killed. The car settled down, two men got off, the control handle was in the up position. These men brushed the operator, who was bending over, from the car. The car started up and the girl started to jump. She was killed. We are requiring an indicator on that type of control. One of the witnesses said he would have turned it off if he had known what to do. We are requiring an indicator to show the direction of up and down motion, and also whether the handle is on up or down motion or turned off.

QUESTION: What is your observation of the proportion of women operators to men in office buildings?

J. A. DICKINSON: Perhaps 35 to 40 per cent at present are women. Most of my work has been in Washington and Baltimore.

QUESTION: On high-speed cars?

J. A. DICKINSON: They are running successfully on cars up to 650 feet.

QUESTION: As satisfactorily as men?

J. A. DICKINSON: If you get a girl about seventeen you will probably not get satisfactory service. If you get a woman of thirty-five and upward who has some sense of balance, I do not see any reason they should not give as satisfactory service, or better, than a bunch of boys.

QUESTION: Do you advocate an interlock on the inner door of the car, also?

J. A. DICKINSON: It is very desirable. We cut it out in Baltimore because it will slow down the service exceedingly. We provided they shall be installed and used in apartment houses, hotels, and department stores, where there are a great many women and children. As for compelling their use, especially with electric contacts that require their closing between every landing, the curtailment of service will be so great as to offset the advantage. They protect against people falling forward and being caught in the jamb. I had a manufacturer submit me a list of twenty such accidents that occurred in the last two years.

QUESTION: Which shows the greatest percentage of accidents—men, women or children? Naturally there are more men traveling. I mean the proportions.

J. A. DICKINSON: We have not any accurate figures on the relative percentage of men, women, and children traveling. We took 4,300 elevator fatalities and serious injuries, covering a period of eight years, and analyzed them. We found an astonishing number of children killed in playing with elevators, many of

them in apartment houses, and an extremely large number in factories. Boys get in on Saturday afternoons or Sundays and want to ride in elevators. In one fatality three boys were killed at one time on Sunday. I think we had thirty or forty occurring under practically those circumstances. Another large number of accidents of that type are caused by children losing toys and reaching for them.

THE CHAIRMAN: I heard a man make a statement that hospitals showed a larger percentage of accidents than any other class of buildings.

J. A. DICKINSON: We had a relatively large number of hospital accidents, and I would not be surprised if his statement were true. Perhaps it is due to the fact that not one hospital in a hundred has a regular operator. The elevators are used by orderlies and nurses, and very often by cooks and waitresses and people of that caliber.

There is one other point you gentlemen have not asked about. That is the question of the effect on insurance rates of safety devices. I have had it fired at me a dozen times in Baltimore. While I was in New York last week, I was in a conference with Mr. Whitney, the manager of the National Bureau for Casualty Insurance Underwriters. I asked him what their attitude was on rating inspections on elevators. He said they were perfectly ready to make inspections on passenger elevators if the public demanded it. He said the question was largely an economic one. At the present time the rate on the ordinary elevator is perhaps \$38. You are all paying the same rate. You may have a very fine elevator, or have a piece of junk. You say, "Why should I pay them the same rate for a high-grade installation with all sorts of safety devices and a weekly inspection service and every possible means of safeguarding the people who are riding? Here is a chap across the street with an elevator whose safety device would not work if you hit it with a crow bar! He is getting the same rate I am. Why is it?"

Mr. Whitney said, "Suppose there was a public demand for rating inspection on passenger elevators. It would necessitate a separate inspection by the Central Bureau. That would add a certain cost to your insurance in the long run to be passed back to the ultimate user. Suppose it is four dollars a year. It will bring your cost to \$42. Say you have every conceivable safety and one operator and your conditions are as nearly ideal as possible. The underwriters say, 'We will give you a flat reduction of 30 per cent.' The total income returned on the adjusted rates must be the same as now. The total premium income to the insurance company must remain constant. It will be a question of the better risks not paying as much in proportion as the poorer risks. The good risks with low loss ratio will have a correspondingly lower rate. Take 30 per cent from your rate and it cuts it to

\$30. That is your adjusted rate. The amount deducted from you must be added to the poorer risk. The fellow with the poor risk will not only have added to him his own sins, but the cost of making that rating inspection. The men with high-grade equipments will want the inspection. To the man with the smaller and poorer grade, it is a different story. If there is enough popular demand for the rating, the Bureau would probably undertake to do it."

THE CHAIRMAN: I thank you. That was a very interesting talk. (Applause.)

After a stereopticon lecture on "Wire Rope"—Its Manufacture and Use," by Mr. C. C. Sunderland, of John A. Roebling's Sons Company, President Coley took the chair, to preside at the business session.

Tuesday Evening Business Session

THE PRESIDENT: I do not like to inflict this upon you tonight. The hour is late. We have been having a good time and have been entertained. The papers have been instructive and very interesting; but nevertheless, I think the problem is something like the one we were discussing the other night at a certain dinner table. The hostess said, "I hate to consider finances." There was very poor team work in that house.

We are going to have team work. We must consider the bitter with the sweet. I think you should know some of the facts and assist your Board of Directors in determining the policy of this Association for its future activities. You are going to elect new officers to guide you and work out your destinies for another year, and we all want to do it in a manner pleasing the majority.

This Association has grown from a membership of about 600 to a membership of about 1,300 in a period of two years. That is a rapid growth. The activities of the Association, however, have also grown very rapidly—more rapidly than the membership, so far as the expenses incidental thereto are concerned. The Board of Directors last year felt if we solicited new membership and secured it, we ought to give you more than a convention. Consequently your own paper was started—the BULLETIN. The proceedings of the convention were published and given to each member, so that you have the proceedings of the convention in its entirety. A Bulletin was circulated to the membership as nearly monthly as the funds would permit. Colonel Strong did a great deal of work in the writing and preparation of articles. Mr. Earle Shultz co-operated to a large extent. Our education as building managers was in the making, based entirely upon the experiences which one man has in a certain direction, and another man in another direction. We tried to consolidate and digest those

experiences and present them to you through these Bulletins and the papers in the proceedings.

That has necessarily taken a considerable fund of money. It was beyond expectation that the elected officers could do all of the detail work connected therewith. Consequently in the wisdom of the directorate of two years ago, an Executive Secretary was employed to do that work, and that Secretary has been maintained through the present administration. We have carried out the policy of the previous administration in the dissemination of technical information which in their opinion, and in ours, was what we felt you wanted in your business. As one of the old boys, I can see a great improvement in the character of the questions asked by our assemblage today as compared to six or eight years ago. I think we have grown from high-class janitors to men who are interested in questions of finance and the technical considerations of our problems. Some of these problems would not have been considered ten years ago.

We have spent money. I think it is time to stop and look over the back work and see if we have accomplished all we hoped to accomplish. Have we read the proceedings of the last year's conventions or are they stuck on the shelves? Do you conscientiously open and read and digest the technical article and analytical comparisons of experience as published in the BULLETIN?

The BULLETIN used to contain twenty-four pages; then it was cut because of lack of funds to sixteen pages; and we were still at sea to know whether we should continue to put out some of these legal opinions on the forms of leases and lease law. Colonel Strong financed certain of those publications at his own expense, earnestly believing that our membership wanted them. He has always asserted we had to give our members more than a convention; that we had to prepare information which they can turn to advantage to themselves and their owners. Consequently for the twenty dollars paid for active membership in this Association, we wanted you to get a fair return. I think you have. The increase in membership from six hundred to thirteen hundred indicates that.

Now how shall we go on? Our finances are not adequate to continue along that line unless we do something to strengthen that end of it.

At the meeting of the Board of Directors this afternoon, this resolution was presented, acted upon and carried. It does change our plan of future activity considerably:

"The Board of Directors recommend that a major part of the activities of the coming year be spent in organizing new local associations on the assessment basis of finance."

That means you are not going to have this BULLETIN with its technical information. If we publish that, we have not the funds to send the men on the road establishing contacts, developing those contacts, and bringing together their associates who

have confidence and then wire Chicago: "Send your National Association Secretary to show us your Constitution and By-Laws and plan of organization, and help us organize a local association for the benefit of the men in this city." After that Association is formed, show them the advantages of being affiliated with the other cities in this National Association.

If that work is done, our Association will continue to grow in numbers. We have the nucleus today through our individual memberships in cities all over the country. They are the starting point to form a local association. They could grow and take in as many members as would be to their advantage.

We are up against two jumps. We can jump that way and probably continue prosperous. We can jump this way and continue maybe more prosperous. The Directors vote today was five for forming local associations as against four for continuing the education of our present membership. I will put the matter in your hands for an open discussion of this resolution.

We realize the useful future of the National Association lies in its ability to function quickly. When the emergency arises, we cannot stop to think of funds. They must be available upon receipt of a hurry call; so that the assessment plan of financing has been considered for a number of years as the most adequate and effective way to finance this Association.

The Chicago Association was functioning before the National was formed. There is an old parent body functioning satisfactorily in a local city. If we adopt what we now consider as the best plan—forming local associations on the assessment-plan basis—if New York sees that Dallas is prospering and growing and performing work New York does not perform because the plan of financing in New York is not right, New York is going to imitate its smaller sister. It cannot be done in a minute. Please stick to the point in discussing this particular resolution.

HOWARD G. LOOMIS, Omaha: In order to bring the question formally before the meeting, I move the adoption of the resolution by this membership. The resolution reads:

"The Board of Directors recommend that a major part of the activities of the coming year be spent in organizing new local associations on the assessment basis of financing."

DEAN VINCENT, Portland: I second the motion.

As a supporter of this change in the policy of the organization, I want to say that so far as I am personally concerned, I am not in favor of it strictly from a standpoint of finance. That is the idea the people on the other side of the question seem to think is our main purpose. The only reason for incorporating in the resolution that associations should be formed on the assessment basis is that is the proper way to form them. Why form them on the wrong plan to start? My idea of the National Association of Building Owners and Managers is just the same as a national

association of any thing else. It should do in a national way what the local association does in a local way, and the national association should not attempt to function as a local association. The main things to accomplish through our national associations are movements national in character. We must have the weight of substantial organizations behind us. We are probably not represented today in 2 per cent of the cities of the United States, while we should be represented in 90 per cent. It seems to me if this National Association is to become the power it should, the first thing is to build up our foundation, and when we want to accomplish results on obsolescence and other things, we will have something back of us that will carry weight with it. (Applause.)

THE PRESIDENT: Bear this in mind: There are 160 members present at this convention. Our membership is 1,300. Therefore only one out of nine members is here. When we decide this question tonight for 1,300 members, we may think we are going fine, but those at home may rebel. Let us go carefully and be sane in what we do.

ADRIEN W. VOLLMER, Philadelphia: Does that mean we give up the BULLETIN? I would hate to see that.

THE PRESIDENT: It does not mean we give up the BULLETIN. The new Board of Directors would of course be guided by this recommendation—that whatever they do, the major part of it would be the forming of local associations.

EDWARD M. APPLGARTH, San Francisco: I should like to ask as to how many of the present local organizations were not organized on the assessment plan? Isn't it true they were organized on the membership plan and went on the assessment plan after they began to learn the value of the Association?

What did your committee decide as to the possibility of going into a town in which we have four members, we will say, who have not been able to get their membership together and form a local association—of doing it with a high rate of dues when they cannot get them together at a low rate? I want to find out whether the assessment plan is a part of the resolution, and whether in the opinion of the Board of Directors they could form local associations on that basis to any extent?

THE PRESIDENT: It is not considered good policy to form local associations on a membership basis when the assessment basis is considered the better way. I think the failure in the forming of local associations has been due to the lack of personal contact. It had to be done through correspondence with no personality whatever. If we send a representative of this Association saturated with the advantages of local association activities, he would not preach the National, but would preach the advantages of forming a local association. After the local association is

formed, tell them of National organization, and show the added strength that affiliation would bring to their local association.

MR. VINCENT: I would like to answer that question myself as one of the main supporters of this movement. I would not go so far as to say I would care to have this Association grow or succeed entirely on the assessment idea. My idea is to build up local associations and a big National Association through local associations. I am strongly in favor of the assessment plan; but if it is the consensus of opinion the assessment plan is not the right way nor possible, I am strongly enough interested in the other policy that I would not stand on that part of it.

A DELEGATE: Suppose we estimate one cent per thousand dollars assessment. Your dues are ten dollars for affiliated membership. That means every building in your local association would have to be assessed at a million dollars. I believe there are a great many buildings valued at less than a hundred thousand dollars in the smaller cities of the country—twelve and fourteen story buildings with fifty feet frontage—having the same problems as our larger properties.

D. M. ROWE, Dayton: Do I understand that applies to the local associations already formed and now in the Association that must go on the assessment plan?

THE PRESIDENT: We are not going to dictate to any association what it must do. We are going to ask these newly formed associations when they do get together to come in on what is considered to be the best plan. Maybe this convention would say, "Do not even hamper them this much."

R. C. TREANOR, Salt Lake City: Isn't it a fact the Board of Directors has given this matter quite a lot of thought and study?

THE PRESIDENT: Not only study, but we have acted—actually spent your money on certain efforts. Then we have come up against a depleted treasury.

MR. TREANOR: Does this membership have to ratify the action of the Board?

THE PRESIDENT: We want to know the sense of our membership.

MR. TREANOR: Is it necessary for ratification or rejection by this assembly?

MR. VINCENT: It is desirable.

THE PRESIDENT: We come to you for instruction—to take a vote on it.

MR. TREANOR: It seems to me we have not had sufficient time to give this matter thought. It has been sprung on us rather quickly. Personally, I think if we could sleep on this, our minds would perhaps be functioning better in the morning. Let us act upon it in the morning.

EARLE SHULTZ, Chicago: It seems to me that in the discussion so far we have not touched the real point involved in this resolution. The reason for putting up this resolution on the part of those who voted for it was we felt the money of the Association was not sufficient to carry on the scale of activities in which we have been engaging, and also to go out and form a lot of new local associations. The majority of the directors felt we had better spend our money sending a traveling salesman out with no samples to try and sell the National Association in the cities without a local association. If you spend your money for a traveling salesman, there will be no money left for any other activities. The Executive Secretary's office will be closed. You will have no BULLETIN and nothing to look forward to except a convention next year, as I see it.

THE PRESIDENT: Mr. Shultz has stated it very fairly. Our dues come in after the first of January and we are then, temporarily, at least, refinanced. The thing is how to get through this year with the funds available. We cannot see them in sight now, to do both things, without the old begging process. We cannot canvass this country and sell local associations, and at the same time edit our BULLETIN, publish our special studies on obsolescence and accounting methods and such other valuable things as we have had in the last two years.

T. H. LYNCH, New Orleans: I have gone through the experience of organizing a local association. My only talking point was the benefits to be derived from the BULLETIN and Mr. Shultz' Exchange. I think we owe a debt of gratitude to Colonel Strong and Mr. Shultz for the benefits they have given to us. It has been my only education as a building manager. I went into the business two years ago. This was the only way I could learn it. I do not think we should cut it out to organize local associations. (Applause.)

CORBIN M. DUNCAN, Little Rock: May I ask for the number of local associations organized in the last year and the year before—the increase of local associations?

COLONEL GORDON STRONG, Chicago: At Portland we reported twenty-one affiliated associations. There are twenty-seven now.

MR. DUNCAN: We have no local association in Little Rock. We are anxious to have one. The question of going on the assessment basis would have some bearing as to whether Mr. Baldwin and myself would be able to interest other building managers and owners.

THE PRESIDENT: I wonder if we understand the assessment plan? We have a number of large cities on the assessment basis.

W. I. LEWIS, Cleveland: It might be better to give the members a chance to think this over a little bit. I move this resolution be laid on the table until the morning session.

The motion was seconded and carried.

MR. VINCENT: We should not sleep on false statements.

MR. LYNCH: The way I understand the finances of the National Association, we need approximately \$1,200. Am I correct? There are over 120 men here, and \$10 apiece is \$1,200. I'm willing.

THE PRESIDENT: This convention will obtain about a thousand dollars from these little programs. The proprietor of this hotel is going to donate \$2,000 to defray the expenses of this convention. (Applause.) Mr. Monville tells me if we continue on the entertainment program of having the young ladies entertain us with swimming, etc.—and I think we should go on with this program—it will cost from \$1,500 to \$1,800. The publishing of our convention proceedings will probably cost \$2,500. Last year it cost \$2,200. I strongly believe this is my job. I should not pass it on to the next president. I should have these proceedings in your hands before I am through. I would not like to pass on the financing of the proceedings to my successor. We have \$1,300 available out of this convention. In order to publish the proceedings we will need \$1,200 additional.

CHARLES E. DOTY, Cleveland: I move we adjourn.

The motion was seconded and carried.

Wednesday Business Session

JUNE 21, 1922.

Immediately preceding the opening of the Apartment House session on Wednesday morning, the President called the convention together to dispose of some unfinished business.

THE PRESIDENT: A "little bird" told me in the lobby that my statement last night as to the convention expenses was not fully understood. The entertainment and other expenses incidental to holding this convention will be between \$1,500 and \$1,700, and that includes everything; the prizes, the cars, the swimming exhibition, and certain features at the dinner, and everything of that kind.

Mr. Smith wishes to make an announcement.

THE CONVENTION CITY

LEE T. SMITH, New York: It is going to be difficult to decide where the next convention will be held. Last year in Portland we were entertained royally, as you fellows know. There was not anything we wanted we did not have. There was not any place in Portland we did not see. At times when some very important papers were being read by men who had come clear across the continent at their own expense to deliver them, the convention hall would be found pretty nearly empty.

It was thought by the Board of Directors perhaps we would give concentrated attention to the papers if we met at some place in the country, such as this place, where we would have no distractions—local shows for the boys and shopping excursions for the girls. This is the first experiment of the National Association along these lines. It lies with you whether it will be continued, and whether you think it is worth while to hold the convention in some resort, rather than a city. I wanted my committee to circulate among you, find whether you are having a good time and if you think this plan feasible. If you will state your views to any member of the committee as to what you think we should do next year, it will be a great help in deciding where the next convention will be held.

It has been said that holding a convention in a place like this is all very well for us fellows who come from the larger cities. We have seen the department stores and the shows. Some have suggested it is a drawing card to hold the convention in a city, because it gives the fellow from the smaller places an opportunity to visit the buildings, and Mrs. Member an opportunity to visit the department stores.

You can help us by stating your views as to where you think the next convention will be held. If there are any cities that want to make a bid for it, it will be considered. If you are not

satisfied with the selection of our next meeting place after it is decided upon, it will be your own fault. Please let us have your opinions.

A SUGGESTION FROM "BUILDING MANAGEMENT"

J. C. LANGTRY, Chicago: I want to say that Building Management will be glad to print the proceedings of your convention in two months or three months after the convention, in succession. It would be impossible to print it in one issue, but we will be glad to take care of that part of the expense. The details of the thing can be worked out with the Directors. If the Association would care to have us, we would be glad to turn over a certain number of pages in each issue to Association matters. They could be turned in to us and we would print them in the magazine. After the issue is off the press, it is a very easy matter to reprint articles in pamphlet form.

Those are two suggestions I wish to offer that would save a little money on Association expenses. (Applause.)

THE PRESIDENT: Your declarations seem to be very well received. There are two items that occurred to me as you were talking. One is, our full membership does not subscribe to your magazine. Could you do this: Could you turn over to our Association copies of the magazines for all our members not subscribers, so that every one would receive a copy of these proceedings? We would prefer to take the galleys and run off everything except the advertising features for those two or three issues, and turn over to the Association the proceedings in pamphlet form which would be sent to members not subscribers.

MR. LANGTRY: I think that detail could be worked out with the Directors. We would be very glad to do either way.

THE PRESIDENT: We have engaged our stenographic secretary for taking these proceedings, and our contract is \$225. I think we should assume that the stenographic expense will be about \$250 if carbon copy is made of the transcript of these proceedings.

MR. LANGTRY: We will be glad to pay for a copy of the proceedings—of course, there is extra charge for a copy—so that you would have a copy and we would have a copy. We would be glad to pay for our copy.

JOHN H. HALL, Cincinnati: I move Mr. Langtry's proposition be accepted.

CAPTAIN W. M. MCINTYRE, Cincinnati: I second the motion.

ANDREW W. VOLLMER, Philadelphia: I would like to know whether it would be possible to get these convention proceedings in such a shape we could maintain our series of the same sized volume? If we want to pay for it, will it be possible?

MR. LANGTRY: The galleys can be held and printed in any form later at a great deal less expense than making them up originally.

THE PRESIDENT: The Board of Directors have had arguments on the question and there have been good reasons why we have done otherwise—won't some Director please explain why the convention proceedings for the past few years have been published in pamphlet form without advertising, at the expense of the Association?

MR. VOLLMER: Will it be practical for "Building Management" to publish the talk we had on Chemistry?

THE PRESIDENT: I think we should take Mr. Langtry's proposition up in two sections—one for the convention proceedings, and the other, his offer on the Bulletin. It seems to me a reprint of Mr. Horne's paper yesterday might agitate some of Mr. Langtry's advertisers. That could be published in a bulletin which would be run under the auspices of the Association independent of Mr. Langtry's Magazine proposition. That would give us free speech at all times.

D. M. ROWE, Dayton: You spoke of a great many members not taking "Building Management." I believe no member can afford not to take it. I am not particularly boosting the game, but I say it for the good of the order. It is an excellent magazine and has some stuff in it we all ought to read. I think we should boost it. (Applause.)

CHARLES E. DOTY, Cleveland: I wonder if Mr. Langtry's offer is not misunderstood? Was not the intention of your offer to publish the proceedings in "Building Management" and not in separate book form?

MR. LANGTRY: That was the idea.

MR. DOTY:—You would then hand the type matter to us and we could have the proceedings printed if we cared to?

MR. LANGTRY: The galleys would be there and we could lift it out of the form and print in any sized booklet.

MR. DOTY: That would reduce the expense of publishing the proceedings.

I would like to answer your question as to why advertising has not appeared, by asking—why should advertising be published in the convention proceedings?

THE PRESIDENT: I think Mr. Langtry was prompted by an endeavor to save this Association \$2,500 in the publishing of the proceedings.

W. H. BALLARD, Boston: The motion has been made in regard to the proceedings. Don't we intend to make a recommendation to our new Directors rather than to take any direct action now on entering into an arrangement with "Building Management"? We have an excellent Nominating Committee and

hope to elect new officers and Directors who will be fully as competent as our officers and directors in the past. I do not think we should do anything more than express our wishes to the incoming administration, and let the details of such an arrangement be worked out by them. (Applause.)

THE PRESIDENT: If you will make that as an amendment to the motion which Mr. Hall can accept.

MR. BALLARD: I should like to make that as an amendment.

J. B. WILLIAMS, San Francisco: I second the amendment.

HOWARD G. LOOMIS, Omaha: There may be some little misunderstanding among the members with reference to the printing of the proceedings in book form which has been done for the past eight years. It is one of the old questions which has been discussed by the Association a number of times in its early history. Originally, "Building Management" published all the papers and discussions in a number that came out immediately following the convention. It was found by one of the conventions that there was some disadvantage in having the proceedings published in "Building Management," particularly in the question of getting members in the Association. They said, "We take 'Building Management' and get all that is published there; and why should we become members of the Association?"

In 1914, and each year since that time, we have published the proceedings, including the discussions, in a book form 6 x 9 inches. The type is set up different than the width of the columns used in "Building Management." It has been necessary to reset it, which has been considerable expense. It has been thought advisable to do that and to include the discussions rather than to have it published in a paper that was going out to promiscuous subscribers and not exclusively to our members.

In 1913, after the Cincinnati convention, we tried the experiment of publishing the papers only in "Building Management" magazine, and the discussions in a pamphlet form. That was entirely unsatisfactory. Therefore, in 1914 we started the publication of the complete proceedings in book form, and those of us who have saved those volumes have a very valuable collection. It seems to me it is worth the extra cost to this Association to continue the policy that has been in force for the past eight years, particularly with reference to publishing our proceedings, including all the discussions, in book form.

It is clearly obvious it is not advisable for the discussions to be published in "Building Management" magazine, even if Mr. Langtry wanted to do so; and I do not think he would want to. It is thought by many of our members the discussions are quite as important—in fact, more important—than the papers themselves.

I simply make this little explanation. While I realize it means a large expense to the Association, I believe the selling

value of these proceedings in book form for new members and otherwise is more than the cost of getting them out. (Applause.)

FRED L. SWETLAND, Cleveland: I was not here in time to hear Mr. Langtry's proposal. I gathered from Mr. Loomis' remarks it is superseding the publication of the proceedings of this convention in book form by the Association. If that is the proposal, I am very much against it. If it is simply to get to the members sooner than the papers can be gotten through the medium of the convention proceedings in book form, I am agreeable, provided the directors have the right to censor the papers before publication. We give papers which are quite often matters of policy, and it might be extremely detrimental to have them published broadcast before the Association has determined its policy.

As to the discussion yesterday morning, there is some question as to whether it is to be published immediately, or at all. I am agreeable to an earlier publication of many of the papers of the convention than we could accomplish through the medium of our convention proceedings. The delay removes the value of some papers to a large extent. Other papers are referred to continually as years go by and are valuable for a book of reference, as Mr. Loomis said.

W. M. MACLACHLAN, Detroit: Mr. Swetland said it was to get these papers out sooner. My understanding is it is because of the expense. If Mr. Langtry can get them out in two or three months, why can't the Association in the same length of time?

MR. SWETLAND: There is a difference between a printer and a publisher. There is difficulty in getting the proceedings in book form sooner than ordinarily published which is almost impossible to overcome. The publisher of "Building Management" has a going concern to set this matter in type. They have a routine date of publication and get it out.

As far as the expense is concerned, I think we are getting into our usual habit of mind of pinching pennies. We had better get some place where we can get some money, rather than to talk about saving money at the expense of somebody else. (Applause.)

Mr. Langtry's proposal is simply a commercial proposition and he, of course, can be lauded for that. He is looking after his own interests, and should. The publication must live, and in order to live, it must be a purveyor of news acceptable to its subscribers. As for accepting his proposition to save expense on behalf of the Association, I am not for that.

MR. LANGTRY: Mr. Coley spoke about certain things that you would not want to have sent broadcast. These could be sent out on multigraphed sheets. There could be an Advisory Committee to confer with us as to what should be published.

I think perhaps some people imagine "Building Management" as a gold mine, but up until very recently "Building Management" has shown on the red side of the ledger.

COLONEL GORDON STRONG, Chicago: Let us get a clear understanding of the position of Mr. Langtry and "Building Management," on the one hand; and of the National Association and its publications—the Proceedings and the Bulletin—on the other.

I agree thoroughly with Mr. Swetland that Mr. Langtry has a right to get out of this Association all he can to promote his paper. If he can improve his paper, he has a right to try to do so.

But we have a perfect right, and I think a duty to our membership, to see to it that our action is in line with the interests of this membership. Now is it a fact you do *not* want those convention proceedings at all; that you wish to stop this series of volumes and abandon this function of the National Association? But if you *do* intend to have a volume for 1922 like your volume for 1921, which I think is a splendid contribution to the profession, you are going to pay out that \$2,500 to get it.

If you *are* going to print your own volume of proceedings, what does Mr. Langtry's request amount to? He is asking you to give him gratuitously a large bunch of editorial matter for his publication. You can give him that if you wish to, but unless I am mistaken, you are going to print your own proceedings just the same. Therefore, there is no reduction of your expense and Mr. Langtry is offering no contribution to this Association.

Don't think you are getting something for nothing. It is Mr. Langtry who will get something for nothing if you give him this editorial matter to carry his publication along. You can give him that right and have this matter published in advance in "Building Management"—but you will depreciate the value of the volume of proceedings to a very great extent by so doing.

I felt last night we were acting in the dark. This is a dark room, but let us work in the light, not only for ourselves, but for the one thousand members who are not here. (Applause.)

MR. VOLLMER: I am fully in accord with what Mr. Swetland said. In the words of Mr. Doyle: "If you need a thing, you pay for it whether you buy it or not." I believe in this situation we ought not to be "penny wise and pound foolish." I think we should do everything in the world we can to encourage "Building Management." They get out a magazine that is creditable in every respect. But that does not mean we must abandon a piece of work that has helped us so many years. "Building Management" cannot consistently publish the discussions. From my conversation with members, I am convinced all of them feel the discussions are the most valuable part of the proceedings.

I think we have enough confidence in the Directors to leave the matter to their discretion. I should like to substitute a motion that the Directors be allowed to use its full discretion in the matter.

MR. ROWE, Dayton: I agree with Mr. Vollmer and Mr. Swetland, but I am afraid Colonel Strong is speaking as though

we had an enemy in the camp instead of a friend. (Cries of "No!")

EDWARD M. APPELEGARTH, San Francisco: We have four members here and sixty-nine in San Francisco. We have a situation there with just a few buildings that do not belong to our local association. There is nothing that would make those sixty-nine men madder than if these convention proceedings came out in "Building Management," for the non-members have told us time and time again they did not need to belong because they can get it in "Building Management." (Applause.)

MR. HALL, Cincinnati: If you have anything that is good, give it to the world. Mr. Emery always said to me, "If you have anything to sell or anything to rent, let the world know it." We are not a secret organization. Why not let anybody and everybody know what we do here at these conventions? (Applause.)

MR. VOLLMER, Philadelphia: I am still more concerned in the sense I am not going to recommend anything to the Directors. I am going to give them full power to act as they wish.

Mr. Ballard then withdrew his amendment to Mr. Hall's motion, and Mr. Hall withdrew his original motion; after which a vote was taken on Mr. Vollmer's motion that the matter be left to the discretion of the Executive Committee.

The motion carried unanimously.

A QUESTION OF FINANCE

LEE T. SMITH: I move the motion laid on the table be raised.

W. I. LEWIS, Cleveland: I second the motion.

The motion prevailed.

The motion read: "The Board of Directors recommend that a major part of the activities for the coming year be spent in organizing new local Associations formed on the assessment basis of financing."

LEE T. SMITH: I kept still last night, and you must admit for me that is wonderful.

I believe the resolution last night was along the lines of having our Executive Secretary devote the major portion of his time to creating local associations. It was the sense of that meeting that the Bulletin and other work of the executive office would be given up.

VOICES: "No!" and "That's incorrect!"

Neither one of those things has any bearing on it, to my mind. You cannot travel and form associations or get out a bulletin if you have no money. I think what we should take into consideration is not whether we should travel or get out a bulletin. According to the budget, we must have \$9,330.13 to run this Association—its present functioning—until December 31st. In addition, we must have \$2,500 for the convention proceedings. The reason this figure does not appear is that we figured this conven-

tion would pay for itself, and the money left would pay for the printing of the convention proceedings. The greatest profit we can count on is \$200. You cannot print \$2,500 worth of proceedings for \$200.

In the Treasurer's Report I showed the dues of twenty-eight active members as unpaid. I sent out an original bill before January first, and the duplicate later on; and in April I wrote a personal letter telling them I wished to incorporate it in my report. From those twenty-eight active members I did not receive one cent of dues nor a reply. I figured ten of them would chip in. Since I have been here, I have had advice from my office three checks have come in. One member resigned, who sent a check to June 30th. I received five additional applications for active membership and trust they will be accepted, which makes \$310. There are some affiliated association dues not paid from associations we can count on.

The voluntary assessment is a certain figure. The Cleveland Association will send me a check for over a thousand dollars. The convention program advertising and convention are speculative figures. We can expect to receive over \$5,300 before December first. We have a deficit of approximately \$3,000. Isn't it better to find out how we are going to cure this?

In 1921 we were running short of money. Fred Swetland jumped up and raised his hat, and in a few minutes we got \$7,000. On May 31st last year at Portland, I had a surplus of \$5,000, which means if I had not received that \$7,000, we would have been \$2,000 in the hole last year. This year the same thing happened. We passed out the old hat and you chipped in to the extent of about \$6,000. If we had not done that, instead of having cash on hand of \$3,000, we would have to take \$2,000 from the \$5,000 of last year and would have shown a deficit this year of \$6,000.

We have \$3,000 more to raise. Are we going to pass another hat? Next year we will do the same. Don't you think it is well for you fellows to figure on a scheme as to how to finance this Association? Then when we get the money to travel and print bulletins, we can do it. We cannot spend what we have not got. (Applause.)

COLONEL STRONG: Mr. Coley said last night, with the optimism characteristic of him, that we are at the parting of the ways. On one hand we may succeed more prosperously, and on the other hand we may prosper more successfully. (Laughter and applause.)

Mr. Smith has, I am relieved to see, brought to your attention in a forceful way just what has happened in the last two years. You must understand it in order to act intelligently. At Minneapolis, when we adopted a broader program, that program was made possible by the action of Fred L. Swetland. (Applause.) Don't think I did it. Fred Swetland did it. If he had

not financed the work it would never have taken place. It could not be put through on hot air. It had to be done on cold cash.

In 1920 Mr. Swetland saved the situation. He started off his successor as a gentleman should, with some chance for success. I felt the same duty devolved upon me in 1921. You know how late Friday night of the last convention I stood and insisted that we finance this Association for the coming year; that we should not start Mr. Coley off with the absolute certainty of financial shipwreck. It was so clearly my duty that I felt I had the right to insist. So we raised the dues from five to ten dollars for affiliated members. We also put out a voluntary assessment plan, because we could not make it compulsory or we would lose 75 per cent of our membership. I have heard it said it was wrong because it was voluntary. Seven associations are paying the assessments in full. That is not my idea of a failure.

Now you must again do something for the coming year or you must retrench. That is the situation I felt it was my duty to urge the Nominating Committee and Directors to bring before this Association that you might understand the facts. This is a group of men competent to act for the best *if* they understand it.

If the major part of our activities and funds for the next six months are devoted to organizing new affiliations on a property assessment basis or on any other basis, it means you must stop your ten service committees that Earle Schultz has worked up this last year—and nobody knows how intelligently and energetically and successfully he has worked except someone who has been in close touch with that work.

It means that you must stop your Bulletin, which two hundred and forty-five members are willing to admit to come into the office. The others would not even admit it—let alone read it!

On the other hand, if you want that work to go on, and in addition, Dean Vincent's work to go on—the promotion of more local associations—don't think you can do it by passing the resolution. You must pass something that's a heap harder to pass than that. You must pass some funds.

I am glad Mr. Smith has told the story in a way that I think you must understand. You must now know what the situation is that is confronting us. If you think that under the circumstances you want to retrench and abandon your operations from convention to convention, and discontinue the executive office and the service committees and the Bulletin; or if you want to start on some new plan; that is all right. But whatever you decide to do, provide the money to do it. (Applause.)

LEE T. SMITH: I think a further word should be said about the increase. Somebody asked the increase over 1921. I said it was \$6,900. That would seem your last Board of Directors had spent your money too freely. That is not so. The reason for this increase is the fact our Association office in Chicago was in full bloom when Mr. Coley took office, and when Colonel

Strong was President, we did not have an Executive Secretary until a few months had passed by. Colonel Strong carried this Association in his office until the spring of this year without charge for rent or light. Mr. Schultz offered to take us into his building, for which we pay a nominal rent.

Last year during November and December I took in very little money—not enough to reimburse Colonel Strong for running the executive office. Now we are in our own offices. We have a new landlord who won't press us for the rent, but we must have money for salaries. I do not know who is going to be the "bright angel" unless we make up this deficit.

MR. BALLARD: I do not think the directors in their resolution really expected to spring quite such a complicated hypothetical question as they have. I do not see how we can vote on each and every separate section of that resolution as though they are one. I do not think the situation is half so bad as it looks on Lee's blackboard. Back in New England we are not happy unless we have a deficit. The voluntary assessment yielded \$6,000. I am sure next year it will yield \$12,000. You can't expect to get a maximum until we get it rolling. This year ends May 31, 1922. I do not know why we may not proceed here and now, or at a future meeting, to receive and record voluntary assessments for the year from May 31, 1922, to May 31, 1923. If I may, I would like to have you record the voluntary assessment for W. H. Ballard & Co. of \$500 for next year. (Applause.)

LEE T. SMITH: In raising this money—\$4,463—eight cities chipped in. Some of them declared they would not chip in further; so we cannot count upon the voluntary assessment to bring very much.

THE PRESIDENT: Mr. Vincent had charge of this. He said he sent the letters out.

DEAN VINCENT, Portland: I do not believe the voluntary assessment would succeed again; further, in my opinion, it is not the proper way to finance an organization. After about three begging letters and four or five arguments, finally we get it. I do not want the job of asking for it again. So far as a voluntary assessment is concerned, I do not want to say it would not succeed, but you should have a fresh man do it every time. (Applause.)

MR. LEWIS, Cleveland: I have been talking with some of the people with reference to our plan for raising money in the Association. It seems to me in a business organization, anything that is of a voluntary character is a more or less unscientific way to do it.

The question of making it compulsory to pay on the assessment plan is one that probably would get the Association in trouble at this time, for the reason some of the local associations are

not organized along that line sufficiently to make the scheme practical.

I was just wondering whether it would be a feasible thing to raise the dues on a per capita basis; and if so, how much would they have to be raised in order to pay the current requirements of the Association for the coming year? Perhaps Mr. Smith could give us information on that point. How much would we have to raise the dues in order to cover the requirements of the Association without voluntary contributions?

LEE T. SMITH: I could not give a lump figure, but you could not put forward another raise. This money I have collected looks as if it came in easy. It did not. The dues are the hardest thing in the world to collect. Last year at Portland we decided at the last minute to raise the dues on local associations 100 per cent, as you know. Immediately there were complaints from some of the members about it; that they did not have a hand in saying whether the dues should be raised or not; that two hundred or so men in Portland, representing a membership of twelve hundred, decided for the entire membership there should be a 100 per cent increase in dues. There was an awful kick about it.

The associations were not advised about it and they did not read the convention proceedings, because every week during the last month just prior to the closing of the books, when the associations pay in, they were sending checks for five dollars per member. Before I left home, I received a notice from an association that its check for five dollars would be sent shortly. There was quite a complaint about raising these dues without their having a say in the matter.

I do not think we can function with the money we have. That is obvious. But I do not think it is right for 160 men representing 1,300 to attempt to raise the dues unless the other members have a chance to voice their opinions first. If you raised them I do not think you could put it over. You could not raise the individual members or the local associations.

E. EVERETT THORPE, New York: I agree with Mr. Smith. It will be an impossibility to raise the dues and collect them. If we cannot raise the dues because it calls upon the members of the Association for more money, it is a certainty we cannot raise more money by telling the members of the Association not on the assessment plan they must come in on that plan because we need the money. I agree with Mr. Vincent the plan of a voluntary assessment is not businesslike and is impractical. It seems to me there is only one way to raise money, and that is by getting more members. We cannot get along without money and we must have more members.

I am in favor of this motion. I should like to hear from others interested in the question as to whether or not we should curtail some of our activities. I would like to know what the

members think of the statements collected and sent out and the Bulletin, and the convention proceedings and the maintenance of the executive office and all the other things which take our money.

THE PRESIDENT: We are living on Chicago, so far as rent is concerned. We had two stenographers up to the first of March. At our last Directors' meeting, the matter of finance was considered and we retrenched by dropping one stenographer and decreasing the activities of the Association except that which Earle Schultz's private stenographer does; and she works two hours a day on our stenographic work gratis so far as our Association is concerned.

We have in the Chicago organization a great contribution to the Association; free rent from Colonel Strong and Mr. Schultz, and free stenographic service for two hours a day, besides their personal contributions of time and writings.

If we are enthusiastic in this Association work, we have 160 men right here. I would rather see a voluntary assessment and contribution of ten dollars a man right off the floor, and then we would not have to ask anybody any questions. That will get \$1,600. Then the Executive Committee can accept as much as it pleases of Mr. Langtry's proposition, and save perhaps \$2,000 there. There is \$3,600 wiped off.

ROY J. KINNEAR, Seattle: I have waited to hear plans concerning the method of raising the funds necessary to carry on the business of this Association for the next year. You say you need funds. The opposition to this motion has not yet suggested a method by which you are going to get those funds. Mr. Ballard suggested a means and nobody has followed suit. To make your position good, you must offer some solution by which you are going to raise that money.

Doesn't it seem a ridiculous thing we cannot go before our membership and get \$10 a year for next year? Doesn't it seem ridiculous we cannot go before them and ask \$20 for the operation of our affairs, and get it? In your local associations, not only are they paying from ten to several hundred dollars for the maintenance of their locals, but they will come across with \$5,000, \$10,000, and \$15,000 to fight the conditions the locals are fighting.

I think the answer is this: This body, as a National organization, has not yet sold itself to the individuals who back the locals. You must sell this organization to those individuals who are the backbone of those locals; and when you do that, you will get \$20 or \$50 a member if you want it, because it is just a drop in the bucket if your proposition is sold to them.

If there is some proposition offered by which we can raise the deficit Mr. Smith has mentioned, all right. The only plan I can see is to adopt Mr. Vincent's motion that we will sell the work of this National body through the local organizations to the men who compose them. I think that is the nut in the shell.

THE PRESIDENT: There is another method of organizing local associations than by sending out a salesman from the National headquarters to talk on the advantage of forming these locals. We in New York certainly could organize Brooklyn. Our members could keep pushing over there every week, and I believe it could be done a great deal more effectively than through a central salesman. Probably Seattle or Portland could bring in Spokane, and San Francisco could bring in other nearby cities. That is a method which can be done locally.

MR. SWETLAND: The question of financing this organization runs back to the time we started. We went on an individual membership basis of five dollars a year. We got a case of courage, and boosted it to ten. We had a membership of four hundred, which was constantly changing. One year it would be four hundred. The next year we would lose two hundred and gain two hundred. We were not growing to amount to anything.

Some of us conceived the idea the only salvation for the organization was a National Association based on local organizations; that to build the right kind of a tree we should have the ground prepared, and the local organizations should be well fertilized and the financing must be on a per capita dues basis. We took the example of Chicago, the first local organization in the country that had sense enough to organize itself on a property representation basis, rather than individual representation. We owe that to Chicago. If we ever will amount to anything, we owe it to Chicago. They saw that the property represented in their organization benefits in direct proportion to the valuation of that property and, therefore, each individual property should bear its proportion of the expense of that protection in direct ratio to the amount of money represented.

That seems the logical way of forming local organizations, and the National should be the outgrowth of the local. It should be the bringing together of all the locals in anything that pertains to national work.

We organized in Minneapolis on the basis of affiliated local organizations. I am a radical and inclined to cut. If there is necessity for an operation, I believe in performing it and getting it over with. I suggested we give the local organizations not properly organized just one year to see the light and come into the fold, or we would drop them. My radical ideas were overruled and we did not drop them, but kept them going on the per capita basis. I could mention half a dozen still on that basis. Naturally, the associations did not produce enough of money under the old per capita system of dues to keep going. I knew they would not. We had to get more local organizations on an assessment basis in order to have more wealth to assess, not only to perform our local activities, but to enlarge the activities of the National Association to represent us properly. We cannot have such an organization on an expenditure of less than \$50,000 a

year. We have not benefited ourselves to the appreciable extent we can if we spend some money.

Do not take me to mean it is simply the expenditure of money that produces results. That is absolutely false. Money is necessary to produce results through the expenditure of brains and effort on the part of our members. We cannot ask our Vice-President to give his intelligence and executive ability and also do the detail work—the typewriting, etc. He must be able to employ people to do what he tells them in order to produce his results.

For the last two years we have been facing a constantly increasing deficit because of our increasing expenses. We must without any further delay get on the proper basis of financing ourselves. Just how it is to be done is a mooted question. The reason that this motion is put before you by the Directors is that the Association may be informed as to the difficulties it faces and as to the exact standing of the Association.

I am a great believer in having the members know everything about the Association, because they will be active and aggressive in association work. If they do not, they say, "There is a clique running it." That is not the way an association is built up and can continue to operate. The Directors, knowing this difficulty and not knowing exactly how the Association would want it handled, is referring it to you for action. It seems to me I never liked to beat the devil around the bush. There is a chance to do so in this situation.

First, I think we can put up to the membership the increasing of dues from ten to twenty dollars. (Applause.) I think it should be done. Then I think we can ask our local associations to voluntarily assess themselves a certain sum—whether one cent on a thousand dollars of valuation or whatever you may think, to promote the organization of local associations on an assessment basis—that money to be devoted to that particular and actual and definite thing.

The President suggested to you what some of us have had in our minds—that the local associations might undertake the work of forming local associations in their own immediate vicinities. Mr. Mead of San Francisco spoke to me this morning about the feasibility of the San Francisco association forming associations in Stockton and Sacramento and other places near by. I said I hoped he would form them on the assessment basis. That is the thing we will have to face, and we should face it now. All local associations not properly financed—and it is improper financing to ask of each member exactly the same amount of money to support either a local or national organization—should be given a certain amount of time and dropped from the National organization. It does not mean more money to go on assessment than on per capita basis. It means one will pay more and the other will pay less. The total amount of money can be either made

greater or smaller as the case demands, and as your activities would warrant. It does not need to be fixed.

In our Cleveland Association we have expected so much more money than we have gotten, we have been on the maximum basis of one-fiftieth of one per cent. We had something like \$17,000 last year to spend, and will probably have more to spend this year if we need it.

I would like to see this motion defeated, Mr. Chairman, and another motion made that we go to our membership for an increase in dues to \$20 or \$30, if necessary; that we go to our membership with the request they assess themselves a certain definite percentage on their total valuation for the promotion of organizations on an assessment basis.

I thank you. (Applause.)

WILLIAM H. CLASS, New York: I listened last evening and this morning and endeavored to get the sense of this business. I saw Mr. Smith put the figures there and seemingly explain them. As I listened and looked back to the organization of this Association, it has always been gambling—spending a little more money than it took in. If we are going to gamble, let's shoot craps or play poker.

We have on hand \$3,747 for the balance of the year. Let's cut our cloth accordingly and spend nothing but that.

I am for this motion with one exception. I do not profess to be talking for New York, but I am going to call black, black; and white, white. New York may not have seen the light. They may be organized wrongly. But if we will admit—and I think we will—the value of association work is of greater benefit locally than nationally, we must further admit the local associations must work out their own destiny and problems for their own local benefit in the way they think is the best way. It is not for any national association—I am not saying this in the spirit of antagonism—to tell a local association now organized or to be organized, how it shall do; or to say, "You cannot come in"; or, "If you are in and not organized on this basis, you must get out," except if in the judgment of the national organization and the majority of its members—not one-tenth, as we have here today—they should decide to have affiliated only those associations on the assessment plan, which may be the only proper plan. But if this is the judgment of the National Association, why doesn't it come out by a majority vote and say so, and tell the local associations if they are not organized that way they cannot be affiliated?

There would be no hard feelings. Then the local associations would be in a position to determine which to them is of greater benefit, the national or the local; and whether to adapt themselves to the wishes of the National Association or the other side—the local problem of running their local organizations as they think they should be run.

I am fully in accord with this motion reported from the Directors with one exception, and that is, the local organizations be organized without any insistence they go on any definite plan unless it is absolutely the plan adopted by this Association and a part and parcel of our Constitution. We have a Constitution, and I have not heard anything quoted from it. There is nothing in it which says a local must be organized on the assessment plan. Amend your Constitution and then kick New York out if they do not do as you tell them to.

I rather think last year at Portland—I was not there—I could only read the convention proceedings—they thought a little bit of the \$2,780 coming from New York. We have \$2,780 in New York. That's easy. We can raise money in New York very readily. But we are organized differently in New York. In order to adapt ourselves to this national plan of assessment, it means we must disrupt a going, active, energetic organization that is getting results on another plan which may be inferior, but is getting results. We would think of it a long time before we threw out 50 per cent of our membership because they would not or could not see the light and come in on the assessment plan. We can raise as much in five minutes in New York on the assessment plan as would represent double our actual budget in the National; but we would lose the contact with two hundred members and the benefit of that contact in the work locally, which I think all here will admit is more important than the National.

The future of this organization, as I see it, is in the local associations on whatever plan is the best plan. Get your local associations. Stop everything else, if necessary. Increase your membership through your locals. Then it may seem wise afterwards to throw out members because they are not affiliated members.

MR. VINCENT: I agree with what Mr. Class has said. I think he has made a clear statement of the proposition.

I do not seem to be able to convey the idea I have in mind to the convention. It is clearly my fault. Every time I have attempted to put over this thought, it has been switched onto a financial problem. That is not the idea I have in mind at all. My idea is to build up a large national organization. When you do that, the finances will take care of themselves. (Applause.) If the local associations cannot be formed on the assessment basis, they should be formed on the basis which will best fit the local conditions. You say if we follow this plan we must raise more money. If you will get back to the resolution, you will find the motion is to recommend the major portion of our energies be expended in the formation of local associations. That does not mean we raise more money. It means if we have \$5,000 to spend, we spend the most of it in this direction. If we only have \$1,000 to spend, this is the direction in which we will spend the money.

I would like to get this clearly before this convention. I am trying to offer a plan to increase the membership and build up the foundation of this organization; and when we go before the nation we will mean something, and not represent twenty cities when we ought to be representing five hundred.

It is not my intention to dictate to the incoming administration in any way what they shall do. This is a recommendation. I think it would be presumptuous to elect a President, other officers and Directors and tie their hands as to how they shall proceed. I wish to recommend the major portion of their activities be devoted in this direction. If the President and his Directors decide that is the wrong thing to do, I am perfectly willing to act on their advice.

MR. VOLLMER: Would the suggestion to do general work be a very practical way of reducing the cost of getting in new members?

MR. VINCENT: I think it would. "What is everybody's business is nobody's business."

COLONEL STRONG: How are we going to devote "the major part" of our time and money to raising of local associations for the next six months, and continue the organization and functioning of the last year and a half? You cannot do the two things simultaneously. The motion before the house is a matter of finance unless it includes the scrapping of the work we are now doing. The Executive Office will close its doors and the activities of the service committee and your Bulletin will stop if you devote the major part of the deficit to doing some work of another character.

MR. VINCENT: A part of the activities probably would be dropped. I do not think we should come into this convention and attempt to dictate the details of the financial policy in the future. Colonel Strong has said the Bulletin has stopped. There is \$160 a month in that budget for the Bulletin. You have \$2,500 for printing of convention proceedings. I would say it is more important to organize twelve new associations than to print the convention proceedings, when they can be printed in "Building Management" for nothing.

MR. MACLACHLAN: For fifteen years we have been trying to build up the National Association. What's the answer? I can only see one answer to putting this thing right. We have 10 per cent of the membership of the National Association here. That 10 per cent has spent good money to come to see a ten-cent dog show. When we tell outsiders our Association dues are \$10 a year, they look at it as a \$10 Association, and they are not interested. If there are men here who will spend a thousand dollars to come to this convention for one week, it is worth \$100 for fifty other weeks of the year. I am in hopes of getting the right kind of an association, and spend \$50,000 doing this work.

MR. KINNEAR, Seattle: It is perfectly apparent the financial subject is the main issue here now. I would suggest the motion for the present be withdrawn and Mr. Swetland's or any other suggestion be taken up and settled. You are going to have to settle it after this motion is put, whether it is carried or not. Each year we are getting into it more seriously. Whether you carry Mr. Vincent's motion or not, you will have to take up the matter of finance. If it is lost, you must take up the matter of finance to see whether you can put over the present program.

THE PRESIDENT: You have the facts in these discussions. We have given the best we have to the Association in giving the facts. As Mr. Swetland says, the body must know the facts to act. I think Mr. Vincent can very well withdraw this motion.

Very fortunately for you, I have secured Mr. Stabler to come. In five minutes he is due to speak. We will reconvene in business meeting before Saturday.

Mr. Loomis withdrew his motion and Mr. Vincent his second.

Wednesday Morning Session

JUNE 21, 1922

The Wednesday morning session was called to order by President Coley.

THE PRESIDENT: Gentlemen: We are very fortunate in being able to secure the contribution which will be made to this Association by Mr. Walter Stabler, Comptroller of the Metropolitan Life Assurance Company of New York. He is also vice-president of the New York Real Estate Board. Mr. Stabler is a man whose addresses are greatly sought by many associations and organizations that deal in finance throughout the country. He personally has probably approved the loaning of more money, particularly for the building of structures which we operate, than anyone connected with any other institution in this country.

I take pleasure in introducing to you, Mr. Walter Stabler, of New York. (Applause.)

Office Building and Apartment House Building Mortgage Loans

Walter Stabler, New York City

Mr. Chairman and Brother Real Estate Men: I am very proud to be able to say that for the last thirty-one years my entire business interests have been in real estate, and for part of that time, the management of apartment house properties. My last job was the management of the Metropolitan Life building, until my duties were changed.

I am very glad indeed to be here and to meet you, many of whom I have known for years; and to be able to join with you, and even possibly to be of some help to you in one of the important features of your work, or what precedes your work—the financing of buildings.

For the last sixteen years, the financing of buildings and the lending of money on mortgage have been my duties. It is needless to say it is a most absorbing and interesting work, particularly to a man who believes in real estate as I do—that it is the best form of investment there is, notwithstanding some figures I see on this chart behind me. (Laughter.)

Now, the subject on which I am to speak is the building loan as applied to office buildings and apartment houses. I concede that the corporation or individual able to obtain a building loan to assist it or him in his operation is particularly fortunate, for several reasons. In the first place, he knows that the money he will ultimately need to take care of that building is provided before he starts. He cannot get that money unless the lender knows who he is, and knows that the reputation of the man or the reputation of the corporation is good enough to enter into such a business engagement. Because, say what you will, there is more or less of partnership between the builder of a large building and the parties who loan the money on that building and loan operation.

That question of partnership hardly exists if the loan is made after the building is completed. Then it is a pure bond and mortgage operation. Where the loans are made as building loans, there does exist a good deal of the situation of partnership, certainly mutual interest between the two parties—the lender and borrower—because the thing that must be done is to finish that building. Until it is done, both sides must do all they can to make things go smoothly—the builders to see there are no liens filed



against it, and the landlord to see the builder is doing his work as he agreed to do.

The first thing we must consider is the land value. That, of course, being the basis of all, the lender must have a pretty definite idea as to what the land is worth and whether or not the proposition as a whole is a profitable one for the location, for the city, and for the conditions that exist at the time. It is very easy to lend money, but it is not always easy to collect your interest and installments if the building does not produce the right returns.

(Here the speaker turned to the chart prepared by Mr. Swetland, showing returns on Cleveland office buildings. See Pages 33-34.)

I must divert to mention those figures behind me. I do not know how those people pay their current charges without going into their clothes to get it. There is something wrong where those conditions exist, and those figures must be the strongest argument possible against the production of any more buildings of that kind in any city where a similar condition exists, and until it has been reversed and you can have some result approximating 1920. It is not worth while to go to the trouble of building buildings if you cannot get more than by the purchase of non-taxable first-class bonds. The rental value, therefore, is an important question, and the lender must be satisfied the new building will produce a rental sufficient to make it a profitable investment for the owner, because if it is not, it will be risky for the lender.

I do not want to talk platitudes to you gentlemen who are experts in this business, but I want to give you the lender's viewpoint as nearly as I can, so that when you go to a lender you will know some of the questions he should ask you.

The next thing is for the lender to be sure the proposed borrower has sufficient financial strength to carry through his operation, and not only that he has sufficient financial strength, but that the corporation is made up of honest men and they know this business. A good many people, particularly in New York, build houses when their only experience has been making clothes. (Laughter.) They get there somehow. That is a dangerous business. In operations such as you are interested in, the builder, if not a general contractor, must know his business, because it is one of the most intricate that exists so far as my knowledge goes, and you cannot know too much about it. It is a good deal better if the man who builds the house has had actual experience with the work with his own hands from the bottom up. You should be satisfied the man is responsible. We always require personal guarantee of the builder if an individual, or of the individual members of the corporation, that the building will be completed, and if any liens are filed they will be removed.

Our company has not felt it necessary to take bonds of surety companies for completion. In the large amount of business we

have done in the last fifteen years, we have never taken a bond of a surety company from any borrower guaranteeing the completion of the building. If we think the builder is not strong enough for us to take his guarantee, we do not want to go into the operation. Our feeling is if we took a bond and there was a failure, by the time we got through litigating with the surety company, there would be nothing left. I think you want to exercise care to see the men who build the building are straight and have the means and understand the work, and you will get along perfectly well without any other guarantee than the individual responsibility of the parties doing it.

I must speak from my own experience. What we do may not be the method of other people. As I do not know just what other people's methods are, I cannot tell you much about them. Our methods are that the plans and specifications must be submitted. My office goes over the floor plans—the general layout of the building—whether an office building or apartment house or \$5,000 dwelling—and criticize, if necessary, and frequently require radical changes to be made in the plans. We have had years of experience in this thing. While we do not pretend to know it all, it is often of advantage to the owner to have a perfectly fresh mind put onto the subject he has studied over many months. There may be some little thing he has missed. He has been running in a rut with a single idea in view; so that my office checks the floor plans before they are sent to our architect.

Our architect is appointed by us to check the plans and specifications and to watch the job from the time it starts until it is completed. He has experts on the building from the beginning to see the work is done according to the plans and specifications, and done properly. We know we have saved many builders from disaster by the care with which this work is done in our architect, Mr. Waid's office. In one case we found the plumber had made no back air connections. The plumbing inspector of the city disappeared and never turned up again. There was a crime committed we were fortunate in discovering.

We have found in high buildings, builders had attempted to use improper footings—had not gone to rock for a high building, or had built buildings on a sloping-rock foundation. These things seem of little importance, but they are of vital importance to the life of that building and the safety of those who must live or work in it.

We are particularly careful as to protection from fire. After the Triangle fire, which all you New York men know about, where one hundred and fifty working people lost their lives, we heard of the Philadelphia tower outside the building which could be reached from a balcony in the rear and people could then go to the ground with absolute safety. We immediately required all buildings where many were at work to use these fire towers. As we were loaning the money, we were in position to say it must be done or we would

not lend it. Builders have thanked us for it since. In all buildings we are very particular in order to safeguard them against fire. We are certain by that means we save life, and that is what I think, each of you men should feel is one of his responsibilities and duties.

Before the work is started, the foundation of soil or rock on which the building is to be built must be thoroughly investigated to be sure it is right; if not, means are employed to make it perfectly safe. If you build in a swamp, you must either go down with caissons or piles and make a foundation to stand under all circumstances. We find cases of that kind frequently. Some of our highest buildings in New York built on Broadway have had to go over one hundred feet to get rock foundation. In building the Liberty Tower, I think the footings were one hundred and six feet below the surface. So there are a good many things to be understood and investigated before the loan is actually made.

It is in matters of this kind where we consider an architect employed by the lender is of as great importance in guaranteeing the work as the owner's architect and the owner himself. The lender's architect has more authority with the subcontractors than the owner's architect, because the contractor knows if these requirements are not acceded to, the lender's money won't come. It is easier for the lender's architect to require certain things to be done than for the owner's architect. That is a question that should be carefully looked after. The lender's architect follows the job to completion, and one of his duties is to certify to the lender when payments are due.

Building loans in New York are made on a building loan agreement which is a very carefully drawn and strong document from the lender's standpoint—as strong as he knows how to make it. That is an agreement by which the lender agrees to lend and the borrower agrees to borrow a certain sum of money on certain property, the payments to be made according to a schedule which has been prepared, being based upon the progress of the work. The final payment is made when the buildings are entirely done and all the city or state departments having jurisdiction, such as the Board of Fire Underwriters, Building Department, etc., have issued their certificates. Then the final payment is made.

Before any money is advanced, of course the title must be examined and approved by the lender's counsel, and the payments on account of the building loan are always made through the lender's counsel. The lender's counsel in New York will examine the records at the minute an advance is made in order to know there are no liens at that time.

One thing that troubles us in most of the cities outside of New York is the question of laws affecting mechanics' liens. If there is one thing you gentlemen from other cities can do that will be of advantage to your communities, it would be to have sensible lien laws enacted by your legislatures. In some of the states the

lender is only a secondary consideration as compared with the man who furnishes material or does the work. In two of the states that I recall—Ohio and Washington—the lender may have advanced half of the amount of the mortgage; and if trouble comes, the contractors and material people can file liens which will take precedence over the money advanced by the lender. The result is that no lender who has any regard for his peace of mind and security of investment will lend money on building loans in those states unless there is security that is unquestioned outside of the security of the property; and to obtain such security costs the borrower money. In these states and many others there are companies that make a business of having the money pass through their hands from the lender to the borrower. They charge a good stiff commission for that service because they guarantee to the lender no liens will be imposed as effective against the mortgage. They protect themselves by paying all the bills, making a very cumbersome and expensive method of handling this business that could be done with ease if the law were modified.

I want to touch on this subject because we have had trouble with it. I want to assure those of you from other states that your interest lies in simplifying the mechanics' lien laws so that lenders can lend as safely as in the State of New York. In New York no lien is effective until it is filed in the county clerk's office, and it takes no precedence over whatever is ahead of it. If the lender has advanced one-half of the mortgage and liens are placed on the property, the money advanced is the first lien. The others are subsequent. When that happens, the lender advances no more money until those liens are removed. The liens in New York City can be removed by paying them, by deposit with the county clerk or by bonding. The courts in New York will discharge liens if a bond of the surety company is produced. The record is then clear and the lender can continue his loans.

In no other state I know of can this business be handled as easily, simply, and safely, as in New York. I want further to say there are no more losses by contractors and material men in New York than in other states, and I do not believe as many, when you consider the vast amount of business that is done in New York every year on this plan. I think I am within the mark when I say 90 per cent of New York City has been built on building loans. The apartment and tenement houses in New York, of which we have I expect two or three billion dollars' worth, with few exceptions, have been built with building loan money, by building loan operators who loan for construction and hope to get their money back from the permanent loans. One individual told me he had loaned ten million dollars on building loans. It was out for an average of about six months. When the building is finished, those loans are replaced by permanent loan investors. So really the greater part of New York has been built with building loan money. The losses under these loans with con-

tractors and material people have been so small as to be negligible.

Material people in other states will argue they can only be protected by the system that exists. I know that is not true. They may be better protected if they sell anybody who wants to buy without regard to his standing or credit. A man in New York cannot afford to do that. Our laws are against the borrower and it is more difficult for the irresponsible man to get it. I think it is of importance to you men that these changes in the laws of other states be made. While we are willing to make loans on large operations in other states, we will not do it unless we know we will be protected. We have done a great deal of this business, and the figures may interest you.

We have on mortgage now in city houses and other buildings nearly \$380,000,000. Most of that has been made as building loans. Since January 1, 1920, when we started on the housing loan business with which you are familiar, we loaned up to June 9th on housing, to accommodate 25,000 families, over \$86,000,000. It has been loaned in 28 states. So that we are trying as best we can to send back to the different states where we obtain money as much as possible to help the upbuilding of those states—the cities, particularly—and provide homes for the people who need them.

I am glad to say, so far as my information goes, the housing situation is very much relieved. Certainly this is true of New York, and I think next fall will see a different situation from that which existed two years ago. If something had not been done to relieve the New York situation, the results would have been bad. While the rent laws have been burdensome to the honest apartment house owner, they have not been half burdensome enough for the dishonest one; and the good must suffer with the bad. Something was needed to restrain the rank profiteers, but the old-fashioned law of supply and demand I think is coming into effect next year, and I believe the situation will be better than we have had for a good many years.

I have covered the subject very imperfectly. If there are any questions, I will be glad to endeavor to answer them. (Applause.)

DISCUSSION

A. D. WILSON, Denver: What percentage do you loan on the valuation of the building?

MR. STABLER: Never exceeding 60 per cent of our value—land and building—in New York; in other cities, 50 per cent.

EDWARD M. APPEGARTH, San Francisco: Do you base your valuations on pre-war cost?

MR. STABLER: During 1920 we valued the building at about double what it cost before the war—before 1914. I know perfectly well many buildings cost 150 per cent more, but we never were willing to go to the maximum cost, because we were positive

that situation could not continue. Now, I think our figures would be probably 75 per cent above pre-war prices. My feeling is the cost will remain about 65 or 75 per cent above pre-war costs, because when you realize how much of the building is labor, my belief is it is not going to be much lower. I do not think it is desirable that it should. If labor would work for the present scale and give us an honest day's work, we could all get along. The building trade mechanics must continue to have decent wages, because the cost of living is higher than ever before. I do not think that it will go back to pre-war prices, so labor must have higher wages than before the war. They are our best classes of American workmen and should be able to live decently and raise their families in a proper way. I think we will probably settle down at 65 to 75 per cent above pre-war costs.

FREDERICK A. BOURLAND, Peoria: Why do you loan 60 per cent in New York, and 50 per cent elsewhere?

MR. STABLER: New York is our home town. We can reach every loan in New York in less than an hour. We are in constant communication with all parts of the city, with brokers and agents, and naturally, living there, we have an intimate knowledge of conditions such as we cannot possibly have in other cities.

MR. BOURLAND: Do you feel you have a closer valuation?

MR. STABLER: I do not know, but we can keep track of it better. In other cities we must take the opinion of local people and get the best opinion we can. At home we have our own view on the subject.

EUGENE N. FRITZ, San Francisco: Do you consider an office building as safe a loan as an apartment building?

MR. STABLER: I think that is a difficult question to answer. In some cases it is. I look upon apartment house property, when properly located and handled, as good a real estate investment as exists. I think many office buildings are built perhaps for the home of a corporation, as our own is, or for banks, and more money is spent on them than would be spent as a strictly business proposition. Our own building cost us a great deal more money than would have been wise if built purely for investment. It was built for our home and it does not pay well—less than 5 per cent—but we wanted a permanent home for our business and we made it good while we were doing it.

DEAN VINCENT, Portland: The inference is you perhaps consider an office building a better loan. That would show why you loan at lower rate on office buildings than apartments.

MR. STABLER: We do not.

MR. VINCENT: Most office buildings are at lower rate than apartments.

MR. STABLER: I suppose they are. We are not cheap skates, Mr. Vincent. (Laughter.)

DOUGLAS G. SCOTT, New York: I want to ask why it is whenever I borrow money on my watch, I never have to amortize it. The minute we borrow money on a building, amortization seems to be in the way. Do you believe that is the most equitable manner to borrow?

MR. STABLER (rising): I will stand up on that subject, because it is my pet. (Laughter and applause.)

Gentlemen, I am not claiming all the credit, but some of the credit, for having started in New York the installment mortgage. About seven years ago we had a good deal of trouble with the loft building properties and some apartment house properties. Conditions changed and people could not pay their obligations and we had to foreclose and get the properties. At that time I made up my mind the only way to prevent that thing happening, so far as we were concerned, was to insist in new loans and renewals of mortgages there be a reduction of the principal. We started out with 2 per cent a year. I was told by some of my good friends I would ruin the business. I said, "I am going to help it."

I had been reading a book by Myron T. Herrick, written while he was minister to France before the war, which gave the system of loaning on mortgage in nearly all the countries of Europe, and some in Asia and Africa. The plan there is a very long-term amortization mortgage.

I was satisfied we were on dangerous ground—lenders and borrowers, both. One of my reasons for instituting this installment plan was to force the owners to save money out of their income on their property. We Americans are not by nature a thrifty race. When we get our money, we spend it. We are not apt to save unless we have to. You have to pay rent and life insurance. If you do not, you lose it. It ought to be just as important and just as much a part of your creed to save money, and the best way is to pay your debts and pay the mortgage on your property. After a while you will get to a point where any lender would be glad to take it, and you are to a certain extent independent of the party who holds the mortgage.

I believe and certainly hope, from the bottom of my heart, the installment mortgage has come to stay in this country. If we go back to the old plan there is going to be disaster as sure as we are here. I hope you men who have influence with owners of property will urge upon them the wisdom of investing a part of the income out of the property in reducing the obligations against it, and putting themselves in so much stronger financial position. (Applause.)

PAUL ROBERTSON, Indianapolis: Won't you tell us something about pre-payment privileges—how far the general trend is for allowing a heavy pre-payment?

MR. STABLER: I can only speak for our own Company. Housing loans on small dwellings are made for fifteen years at current rate of interest, with installment of 3 per cent paid on each interest date; and the borrower has the right to pay the entire loan off on an interest date at any time after three years; so that while he has a contract which binds us for fifteen years, we have a contract which binds him for only three years. That makes the easiest possible terms for the man who wants to own a home, and it is making him save 6 per cent a year on his original debt.

We do not make loans over five years without installment payments. On what we call investment loans we do not give such option. These housing loans are part of our welfare work.

GEORGE RANDOLPH, Memphis: Assuming a loan is to be made upon an office building to be run for profit, what method does your Company pursue in estimating the probable earning capacity of that building?

MR. STABLER: We have some idea as to rental value. The owner makes a statement. We try to check it up with the rents prevailing in the city. The cost of operation is submitted to us and that we check up. We want to feel reasonably sure that the income to be derived will pay the operating costs and carrying charges and allow a good return to the owner—enough to enable him to pay something on the mortgage and have something left.

RAE T. SMITH, San Francisco: What percentage of income from the investment do you demand?

MR. STABLER: It depends upon the class of property. Some property requires a larger gross income than others. Office buildings and apartment houses require large gross income. The loft building does not need so much because the operating costs are smaller. I refer to buildings centrally located in New York, from Fourth to Seventh avenue and not farther north than Forty-third, where most of our clothing is manufactured, and similar lines. Those buildings are leased in floors, and there is no janitor service or light—nothing but elevator service and heat and cleaning of halls—so that they do not need so large a gross rental as in other classes of property.

MR. APPLGARTH: If you had a request for a loan from a city in which there is 11 per cent vacancy, would you be liable to deny the loan because the city did not need more office buildings?

MR. STABLER: Yes, sir. We will not make a building loan if we are satisfied there is an oversupply of that particular class of buildings.

ADRIEN W. VOLLMER, Philadelphia: How do you regard hotels as compared with apartment houses and office buildings as good investments for loans?

MR. STABLER: We have made a great many loans on hotels—some large, some small—from the Plaza Hotel in New York, with a loan of \$8,000,000, down to as low as \$125,000. We will only loan on hotels in the commercial class in cities where they are needed and where there is a general community interest in having the hotel built. We loan generally not over 40 per cent on such houses. We consider hotels, properly placed, among as good loans as we have. We have a good many of them.

J. T. CURRAN, Seattle: How do you consider the retirement period on a hotel as compared with other property?

MR. STABLER: We have not gotten as far as considering any hotel obsolete, but we require installments, and generally try to get from 4 to 6 per cent per annum on the principal on hotel loans.

ALFRED C. KENNEDY, Omaha: Do you limit the loan to a certain amount—so many times the value of the land?

MR. STABLER: No, sir. Of course, we like to get as high-priced land as possible—more nearly central—but in the smaller cities the land values are not as proportionately high as in the larger ones, and it costs as much to build a building. So that we have many cases where the building may be ten or twenty times the value of the land, and we consider the whole thing as security for our loan.

MR. ROBERTSON: On what basis do you amortize an office building loan?

MR. STABLER: From 3 to not exceeding 4 per cent unless the owners of the property want to pay more. Many people say they want to pay a certain percentage of the loan each six months. They frequently ask the privilege of doubling the amount, and we grant that always.

E. EVERETT THORPE, New York: Will you tell us the difference between the amortized and the installment loan?

MR. STABLER: In the amortized loan there is a fixed date which in a certain period pays the loan with interest. Say it took \$50 every six months to pay the interest and certain installment, that \$50 is paid for the whole term. The effect is as the principal is reduced, a larger proportion of the amount paid is applied to the principal, and less to interest.

On the installment loan, so much is paid on the principal, and when that amount is paid, there is less interest to pay next time.

I like the installment loan, because the borrower can tell how much principal he owes and figure what he must pay next time. With the amortized loan, he generally has to write us to know how much is left of the principal.

OSCAR D. DIKE, New York: You said you desired to make the owners save a certain amount of money. Isn't it working out the tenant is paying that by an increase of rent calculated in setting the standard of rents?

MR. STABLER: I do not think so. Everything in the last two or three years that had anything to do with the rent was supposed to put the rents up. (Laughter.) There wasn't enough space and the landlords got every cent they could—particularly a certain class of tenement house owners in New York.

ARTHUR J. HOPPER, New York: What is the cost of the loan?

MR. STABLER: To get a permanent loan from us, including attorney's and architect's fees and the recording tax of one-half of one per cent and other expenses, it would be in the neighborhood of 2 per cent—possibly a little more for small and a little less for large loans. On very large loans it might not exceed one and three-fourths per cent.

DOUGLAS M. CRUIKSHANK, New York: You spoke of inspection service and the service of your office through the architect. Is that a flat basis? How do you arrive at that?

MR. STABLER: It is a percentage on the amount of the loan. On large operations it is three-eighths of one per cent, and on smaller ones, one-half of one per cent.

PRESIDENT COLEY: I gladly take this opportunity to thank Mr. Stabler for delivering this splendid address.

(A rising vote of thanks was given to Mr. Stabler amid applause.)

Mr. E. Everett Thorpe, of New York, then took the chair.

Report of the Apartment House Committee

A. D. Wilson, Denver, Colorado

To the Members of the National Association:

The Apartment House Section has co-operated with the



Building Managers in trying to get in touch with all the apartment house associations throughout the United States and have them send representatives to this Convention, as we feel that the Management problems of Office Buildings and Apartments are very similar and should go hand in hand.

Practically all the problems that come up in the management of office buildings are problems of the apartment house owners and manager and therefore most every paper read before this Convention will be of vital interest to the apartment house man.

We believe that we need more co-operation than the office building manager and are trying to standardize our service, accounting and leases.

We are holding luncheon meetings from 1 to 3 each day in the room directly above this room and are discussing the different problems that we are facing throughout the year, such as:

- | | | |
|--------------|------------------|----------------|
| (1) Service. | (3) Legislation. | (5) Operation. |
| (2) Leases. | (4) Repairs. | |

In these discussions we would be pleased to have any interested join us.

This year we have started our experience exchange of which Mr. Kennedy of Omaha is chairman and will soon have a tabulated form of income and operating expenses of similar apartments throughout the United States.

The Apartment House Section is the child of the Building Managers and we feel that with your co-operation and encouragement that in time we can build up a strong organization, which will function hand in hand with this organization.

Respectfully submitted, A. D. WILSON.

I think there are a number of apartment house organizations that would incorporate and come in touch with this Association to carry on the plans of the building managers.

CHAIRMAN THORPE: I take great pleasure in presenting to you Mr. W. J. Palmer, president of the Omaha Association. (Applause.)

Plan, Construction and Operation of Small Apartments

W. J. Palmer, Omaha, Nebraska

Mr. Chairman, Ladies and Gentlemen, Members of the National Association of Building Owners and Managers.

First of all, may I take this opportunity to express my personal appreciation of the privilege extended to the Apartment House Section of this Association, by the Directors, in recognizing our Section to the extent of setting aside this entire day for Apartment House Topics.



I know I voice the sentiment of all present, who are interested to any extent in Apartment House Management. Many of us attend these Conventions year after year with the expectation that in the various papers and discussions dealing mainly with Office Building Management and Operation, we may be able to glean something of value that can be applied to our Apartment Building Business. True, there is much in common in both classes of Building Management and Operation, but there are also some phases of apartment building, construction

and operation that are peculiarly apartment propositions; these may be of so great importance at times as to be deciding factors in the success or failure of an apartment building. Therefore, I say, we sincerely appreciate this opportunity of time, to discuss principally apartment house questions.

Some of the things I bring out in this paper may seem foolish, or will not be understood by the men of New York, because their conditions are entirely different than those in the smaller cities—such as Omaha—in the middle west and coast cities.

The subject of this paper as announced on the program is “Plan, Construction and Operation of Small Apartment Houses.” I have taken the liberty of interpreting this title a little differently than the impression probably at first conveyed to your minds. The subject as I have considered it is, “Plan, Construction and Operation of Small Apartments.” The units or apartment suites are small, but not the buildings.

This title then, very evidently divides itself into three sections. 1st, Plan and Design. 2nd, Construction. and 3rd, Operation and Management. Each of the separate divisions in itself would be a sufficient subject for a lengthy paper, but as I am to cover the entire proposition, I shall only be able to hit the high

places, as it were, and suggest that, at some future convention, each division be handled separately and more in detail by experts on the respective subjects.

I—PLAN AND DESIGN

Before going into the discussion of apartment house construction, let me state that in my opinion, whether it be large or small apartment units to be built; whether they be large or small in number, the prospective builder (that is the one whose money is to be invested) should, if not firstly, at least secondly, procure the services of an experienced apartment building manager; if not for the entire period of design, construction and later operation, then at least, in an advisory capacity during the designing, and planning period. We know that the office building owners and managers have come to realize this in recent years and many hundreds of thousands, yes, millions of dollars have been saved in the cost of buildings not only in their construction, but later in the operation of these buildings, because of the trained and experienced advice given by a professional office building manager. The same fact applies to apartment buildings. The services of the experienced apartment house manager during the designing period are just as essential as those of the architect.

By no means do I mean to belittle the architect or his profession or infer that his services are less essential. On the contrary, his services and advice are just as essential now as ever. He is an authority on structural strength of materials, carrying load of soils, required depth and size of footings, reinforcing of floors, building code laws and restriction and the most well informed authority on styles of architecture and elevations. His duties are classified with the professions and arts; but, he may not be an authority on what the renting public requires nor which is the most economical plan to design from the operating viewpoint.

Having secured the services of apartment house manager and architect, we come to the selection of lot location. This is a vital step when planning to build small apartments. Generally speaking, small apartments may not safely be built in the suburbs of a large city. Sometimes, it may be desirable and profitable so to do, but not generally. It may be desirable, because of low land values. It may be desirable, if the suburban location has some industry nearby employing a large or sufficient number of people to provide tenants for the building; but even then, if the district is not closely built up, these people would prefer detached dwellings for their homes, rather than living in small apartment quarters. This location, then, is more hazardous than possibly we would care to gamble with, even considering the low price of the lot.

We might prefer a district well built up with residences not so far out. We probably would find difficulty in locating here because of the zoning laws; quite generally in effect in our larger cities. It would be natural to select a corner lot, but we are only

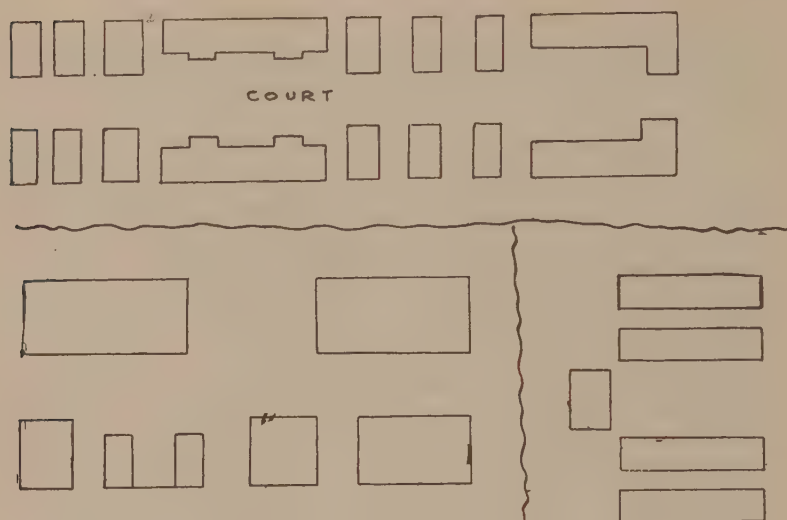
permitted to cover a portion of it with building. This, with the higher value of the lots in the district, would bring the investment in land too high in proportion to the apartment unit construction cost.

Where then, is the best or likely the safest location for our small apartment building? In every large and growing city there is, within close or comparatively close walking distance, a somewhat forgotten or "has been" residential area, a district where there are old homes or flats which are sort of neglected or not worth remodeling. Probably the people living there are not the class that would or could occupy apartments. They are individual owners of, or, tenants in, these once good dwellings left by the better class, as new residential districts were opened farther out. In this area may be found some large holdings, with possibly one or two spacious homes of the early well-to-do families. These may be in estates with the heirs very ready and willing to dispose of the property at a reasonable figure and even glad to assist in financing the proposition, if they realize the value of the improvement proposed for this land. This in my opinion is the location to select.

We are probably not restricted seriously by zoning laws and if some consideration be given the immediate surroundings, a good location can be selected that will not be injured by some undesirable improvements near by. As a general rule, if it is seen that a very desirable improvement such as an apartment building is located in such a district, it will induce others to follow with similar desirable building projects. So much for location of building site, which is within walking distance to the place of employment of a sufficient number of people to keep the apartments occupied to advantage.

Now as to size of building or buildings, size of apartment units and number of apartments. We of course will know the extent to which we can go as to investment. That will decide as to whether it is to be a large community proposition of a number of buildings in a group or just a single building. In a large proposition, as it has been my privilege to assist in developing, we are convinced that it should be laid out with a number of buildings so located as to permit plenty of light and air to all units. The buildings facing on a court or street or parking area with walks, flower gardens, fountains and such. The rear of all buildings being to the outside, less consideration need be given to the adjacent property in that location. A central heating and power plant, and laundry for the entire group, can be located conveniently so as to eliminate cost of duplication. The size of any one building of the group is not so important, only that sufficient light and air be provided. Every apartment unit should have two exposures permitting cross ventilation. The buildings should not

be more than four stories high, preferably three stories with no elevators.



Drawing of Court idea and buildings.

The number of apartments to a building might vary from 12 to 24 depending on the size of the units. These units may be one, two or three room apartments. I do not consider more than three rooms a small apartment. We count the kitchen as a room, if it is such. We do not count the bathroom as a room. A one-room apartment would consist of one good-sized living room possibly (12x16 or 14x16 or 13x15), a bathroom, a cabinet kitchenette, and a clothes closet or dressing room with wall bed arrangement. A two-room apartment consists of a living room, a kitchenette or dining kitchen with a bathroom and bed closet or dressing room and wall bed. A three-room apartment consists of a living room, dining room and kitchen with the bath and dressing closet. This apartment often carries the additional wall bed to be used in the dining room. Or, in place of the dining room we might have a bed room as the third room.

As I stated before, each building in a group need not contain a large number of apartments, as in the operation of such a group proposition one Janitor can easily handle several buildings. He would have nothing to do with the heating or repair

work, as that would be done by an engineer or utility man, for the entire group.

(Refer to drawings of buildings adaptable to group propositions.)

If only a single building is to be erected it should be not over four stories in height, preferably three, with no elevator. I do not consider an elevator a profitable installation for any apartment house, unless a furnished apartment hotel is maintained. Then it would be advisable to build a six, eight or ten-story building. The apartments I am considering are not the hotel type and generally are considered unfurnished with the exception of the kitchen cabinet, a stove, refrigerator, the wall bed, and built-in dresser.

A single—not the group—building proposition, not over four stories, might contain from 24 to 64 apartments, depending upon the number of rooms in each unit. The problem in a building of this size is to provide light and air to each separate apartment. We must endeavor to have an outside window for all or as many of the bathrooms and kitchens as possible. An air well on the inside of a building is not satisfactory. Long dark halls are not desirable, and it is not a satisfactory arrangement to have the kitchen entrance on the same hallway as the living room or main door entrance.

In the smaller apartments, provision must be made for the delivery of ice, groceries and laundry to each, without entering the apartment, as the majority of tenants in these apartments are not at home during the day. This feature may be taken care of by arranging a receiving room in the basement, to be cared for by the janitor. Another way is to arrange small cupboard receiving doors and ice-box doors in the outside walls of each kitchen. Incinerators for the disposal of garbage are a necessity nowadays, as the old garbage can method of removing garbage is both unsanitary and expensive. Light, airy laundries with gas driers and washing machines, are very much desired and almost a necessity in the modern apartment building.

There are many details to be considered in the designing and planning of this type of building. We have just considered a few, as we must hurry along. I can only mention several others, such as, easy access to all apartments from rear stairs for the moving in and out of furniture and baggage. The Electric system is not usually given the consideration it should have and if not installed correctly becomes a source of much annoyance to a manager. Sufficient closet space is difficult at times to provide and many times too many doors are arranged so as to interfere with each other as they open or close. And so on, we could continue with more, but we shall pass to our next division.

II.—CONSTRUCTION

Construction, as we know, is the carrying out of the plans and specifications previously prepared. The style or type of construction, of course, may vary greatly, depending on the size, height or location of the building; whether it is a permanent investment to be operated by the owner or whether the property is being built for sale. Generally speaking we might consider two classifications, Fireproof and Non-Fireproof. The Fireproof building, so-called, is not absolutely Fireproof as we have come to realize that probably no building can be made fireproof, but we may call it Fire Resisting. This building would be of brick, stone, tile, cast concrete, or stone, for wall material, with reinforced concrete floors and columns. Partitions of metal lath, tile, pyro-bar or cinder block. Flooring in the apartments and halls may be of concrete, Composition material or wood. The inside trim, of wood or metal. Walls plastered, with sand finish tinted in water color. Or, have the finish plaster coat smooth, with wall paper decorations.

The other type of construction—that is, non-fireproof—may be brick tile, cast concrete block, stone or wood lath with stucco, for wall materials. Steel or timber beams and columns, wood floor joice, wood lath or fibre board as partitions; and generally speaking, mill construction throughout. This, of course, would be a cheaper type of building and is generally the type followed if the property is to be put up for sale. Personally I have not had any experiences in the construction of this class of building as my activities have been with the more permanent, fireproof, type.

We found it advisable never to have much of a basement, that is, below grade. Excavation was never made lower, if possible, than would allow the basement to be half its height out of the ground. This permitted plenty of light and air to the laundry and locker rooms. The boiler room, of course, was dropped lower because of necessity for proper steam and water circulation. The janitor's apartment was always in the basement but as a rule the windows were never below grade. The first floor apartment windows were high enough from the ground level so that any one could not look in or gain easy entrance to the apartment by the window route. It is always objectionable to a prospective tenant to have the apartment windows on ground level.

Walls of the first buildings we built were of brick, later we used brick and tile and finally cast concrete blocks, either faced plain or stuccoed. Reinforced concrete was used for floors, columns and stairs. Partitions were of pyro-bar or cinder block, plastered with smooth finish, as we papered all living rooms. The apartment floors were of oak; hall floors of cement with carpet coverings. We were induced at one time to use magnesite com-

position flooring throughout several buildings but it was a sad disappointment, and we returned to the oak flooring.

In several buildings we finished the floor surfaces in cement but that was not satisfactory from the standpoint of maintenance as we found no serviceable dressing to keep the surface pleasing to the tenants. In the finishing of the oak floors our experience taught us to finish them in the natural color as they are less expensive to maintain than if a dark stain is used.

Another tip for economy of maintenance is this: never permit the kitchens to be white enameled. The woodwork should be finished natural and varnished; the plastered walls painted with flat oil paint or papered with sanitas. A white kitchen is very attractive but it is too expensive to maintain in proper style. We always have favored the idea of papering living room walls rather than painting. Because, if a tapestry paper of fairly good quality is used it can be cleaned several times with small expense, and does not show soiled or worn places as will the painted walls.

Suggestions such as these made by an experienced apartment house manager during the construction period will save many dollars. In the small type apartment redecorating is required more frequently than in the large type because of the intensified living in a small space. Our method of construction has been somewhat different than that usually followed. We endeavored to standardize as much as possible in all designs. We were able to do this more easily as the buildings erected were of the same class and all owned or controlled by our organization. We built very little on contract.

Forms for concrete work were built in sections at our wood-work mill, each section being numbered in a system which provided that that section be used in a particular place. The sections were bolted or clamped together so that each could be removed in good condition to be used again. Our Plumbing and Heating Department arranged for all pipe and vent openings in the floors before the concrete was poured. Tin sleeves were so placed on the wood forms that drilling of holes through the concrete was unnecessary after the floor was finished. Much of the woodwork trim and casings were all prepared at the mill, even to the hanging of doors and window sash. They were then taken to the building and placed in their proper positions with very little expense or difficulty. We maintained our own warehouse, with trackage facilities, had our own concrete block manufacturing plant and maintained a fleet of big trucks.

It was only because of operating in this manner that we were able to build apartments satisfactorily during the high price period of 1919 and 1920.

There are many ways and means of economy in the construction of any building, without injuring the value or serviceability of such building, but we cannot take the time now to discuss construction further, so will pass to our third division.

III.—OPERATION AND MAINTENANCE

There is probably very little of importance under this section of our subject that I could comment on that you do not already know from personal experiences; as this subject is fundamentally your profession.

The operation of small apartments is not so different from that of large apartments. The tenants which one has to deal with in the small type apartment are the general every day class of people, such as clerks, bookkeepers, salesmen, young business folks and the like. They do not require a great amount of service. They perform their own household duties, laundry, etc. They are not as a rule hard to please or satisfy. They are reasonable and considerate, and in my estimation are the best class of tenants.

The rental for apartments of the type we have been considering will vary from \$35.00 to \$47.50 per month for the one-room apartment to \$70.00 and \$80.00 for the three-room. In most cases they are rented from month to month with or without a lease. If a lease is signed it is of such form that it may be terminated upon giving one month's notice.

As stated previously in this paper one janitor can easily care for a large number of these apartments if built with the idea of economical maintenance in mind at the time of planning so that the expense for janitor service per apartment is very small. All apartments are metered separately for gas and light which the tenant pays for in addition to their rent. They also pay their own telephone. Light globes are not furnished nor fuses supplied if burnt out although the janitor will replace these for a certain fixed amount. In the case of a group of buildings in one location an engineer looks after the mechanical equipment, a decorator can be maintained continuously, also a house carpenter or utility man. The janitor in that case is only required to maintain cleanliness and so look after as high as 72 to 120 apartments.

The small apartment unit then, built in sufficient numbers, properly located, designed and planned, built right and intelligently operated, is not only a satisfactory investment but a convenience and necessity to our present day society in our congested cities. However, one must continue always to keep abreast of the times and be prepared to improve. Install all the very latest conveniences adaptable to these apartments, lest they soon fall into the tenement class and thus turn out to be a poor investment. I thank you. (Applause).

DISCUSSION

MR. HOLBROOK: What depreciation have you allowed on your apartment houses?

MR. PALMER: We have been taking three per cent on income tax return and have not been called.

MR. APPLGARTH: Supposing you build a house with fifty rooms. What would it cost per room? What is your investment on which you receive your \$47.50 rent?

MR. PALMER: We count it by units, by apartments. Figuring what the ground value and building cost amounted to, and dividing by the number of units we have, we arrive at the amount of rent to collect in order to get a fair return.

MR. APPLGARTH: What is the value of the one-room unit, and what is your cubic foot cost?

MR. PALMER: It varies. The first apartments we built after the war ran approximately between twenty-five and thirty cents per cubic foot.

CHARLES GEIGER, Dayton: What would a unit cost that would rent for \$47?

MR. PALMER: About \$2,000.

T. A. FALCONNIER, Knoxville: Do you furnish shades or awnings?

MR. PALMER: We do furnish shades and awnings.

CYRUS A. HACKSTAFF, Denver: In using cement floors, what is the best preparation, or has linoleum been satisfactory? We have tried to use cement and put on a dressing to make it look like a wood floor. They object to the hardness, mainly.

C. F. SCHMIDT, Indianapolis: What do you think is the best distance between the two buildings—what open space?

MR. PALMER: There should be at least twenty feet. We have some as close as sixteen, but it is too close; preferably twenty-four to twenty-eight feet.

MR. BOURLAND: Taking your three-room unit in that building you mentioned of \$2,000 for one room, what additional do you figure for the other two rooms? What would be the total cost prorated back to a three-room unit, fireproof?

MR. PALMER: The cost would not be proportionally as much. I do not recall what it would be.

MR. BOURLAND: Do you have in mind a total figure for a unit of twelve to fifteen apartments?

MR. PALMER: One building of forty-eight apartments had a combination of one, two and three-room apartments. The cost on that was close to \$175,000, about equally divided between one, two and three rooms.

MR. HOLBROOK: Is it a common practice for the owner to lease out his apartment house or operate it under separate management? To lease their entire apartment house, a great many have it returned to them in rotten shape.

MR. PALMER: It is not done that I know of. Most of the apartment houses in Omaha are operated either by the owner or by agents—probably the majority through an agent for a year

or indefinite period. He in many cases has practically the exclusive charge of the building. He does not go to the owner for questions of repair work, but looks after it himself unless it gets into a large amount. In the decorating of a room or keeping the building generally in repair they have exclusive control.

MR. FRITZ: In a two-room apartment, counting the kitchen as a room, what is the length of tenancy and the class of tenants? I mean do you have couples, or is it occupied by single men and women?

MR. PALMER: The majority of our tenants are couples. Our apartments are unfurnished. They are different than yours. The furniture belongs to the tenant excepting the built-in features—stove, refrigerator, and such as that—a Murphy bed, and the built-in dresser. The average rent term is about nine months to a year, although they rent from month to month.

JOHN H. HALL, Cincinnati: I understand you furnish screens and awnings and shades?

MR. PALMER: Yes, sir.

MR. HALL: Do you take the screens down in the fall and replace them?

MR. PALMER: Yes, sir.

MR. HALL: What do you do about cockroaches and bed-bugs?

MR. PALMER: Eliminate them as fast as we can. We take care of them. We do not want to have them in the building.

MR. HALL: Do the tenants look after the laundry?

MR. PALMER: Each apartment is metered separately with a gas meter. By turning a valve the tenant uses his own gas through his own meter at the laundry stove and for the gas driers.

MR. HOLBROOK: What is the practice as to carrying rent insurance in case of a fire?

MR. PALMER: I did not know anyone does.

MR. HOLBROOK: We carry rent insurance for the entire building. It protects us.

MR. PALMER: In the type of building we have, we never have experienced a fire of any kind that caused damage other than the burning of awnings, etc. There is a chance for a fire, but it is fire resistive and not so likely to occur as in a poorly protected building.

MR. KENNEDY: In that answer, I might add we have not to my knowledge had any fire that amounted to anything in apartments in Omaha. Most of our apartments are not grouped to-

gether. They are scattered. We have not the immense number of apartments to be found in many cities. We have had a little advantage in that there is a good deal of ground around each individual building. There has been a great deal of getting a lot of ground for the apartment, and it is the cheapest stuff we put into it. We can often build apartments in good residence districts and pay \$50 to \$64 a front foot for the ground, so you can afford to get it. It is always an asset.

MR HOLBROOK: We have had two serious apartment fires in Portland the last two years, and although covered by fire insurance, one apartment received such a black eye it has never been rented since. You can see the loss in rent is a serious matter.

MR. FALCONNIER: In any of your apartments, are you using automatic elevators, and if so, I would like to know the satisfaction you get out of the service?

MR. PALMER: We do not use elevators at all. They are only three and four-story buildings, and elevators are not practical for that height of building. In my opinion, the only buildings to warrant an elevator are the apartment hotel buildings and the larger type of apartments.

MR. SCHMIDT: What difference in the rental do you make of an apartment on the third and one on the second floor, in the same part of the building, having the same light, ventilation, etc.? What per cent decrease do you make for the third floor?

MR. PALMER: We do not make a difference, as a rule. The third-floor apartments will rent almost as well as our second floor. We have trouble with the four-story building.

MR. SCHMIDT: We have trouble getting people to walk to the third floors. We make a slight decrease in rent. To get from the first floor to the street level, we have had five steps, which brings the basement half under ground, and two flights to get to the third-floor apartments.

CHAIRMAN THORPE: I express the feeling of the meeting when I say we appreciate your very instructive and interesting paper. I thank you. (Applause.)

Adjournment.

Thursday Morning Session

JUNE 22, 1922

The Thursday morning session was called to order at 9:30, with Mr. Earle Shultz, of Chicago, Second Vice-President, in the chair.

CHAIRMAN SHULTZ: Mr. Lee Smith wishes to make an announcement.

LEE T. SMITH, New York City: There seems to be a difference of opinion as to where our next convention will be conducted—whether you want to meet in a playground or a city. I have had these little slips printed and passed around and want to know whether you prefer a city or a summer resort. If the latter, place its location.

CHAIRMAN SHULTZ: Our first paper this morning is one of great importance. During the past few years we have had a comparatively small amount of office building construction. When it is resumed, I believe we are going to develop a type of building in which the primary consideration will be one of economy of operation and the possibility of the greatest return on the investment.

We are fortunate this morning in having a paper by Stephen F. Voorhees, an architect of New York, on this subject. I take pleasure in presenting him. (Applause.)

Planning of Buildings for Economy of Operation

Stephen F. Voorhees, New York City

Mr. Chairman, Ladies and Gentlemen: In spite of appearances to the contrary, I was rather reluctant when Mr. Coley invited me to come out here, stating that I was not accustomed to speaking and writing—that my job was on the rougher end of construction. Mr. Coley said, “Just give them a back-door talk and they will know what you mean.” So if my language and presentation are not orthodox, remember I am following the suggestion of Mr. Coley and talking as a construction man. (Reads.)



A building is an instrument of service. If an office building, it is used by the occupants just as directly as the typewriters, telephones, and even pens and pencils. A warehouse is just as much a part of the machinery of storage and distribution as the trucks. In manufacturing, the building functions quite as actively as the machines engaged in the process. The house is just as essential a part of the home as the beds and chairs and the kitchen range.

This is a conception rather than a definition of a building, but it is a fundamental conception and is frequently—perhaps usually—crowded out of mind by the many things which must be considered in a building project.

I am sure that it is not necessary to take time to prove this fact of service to those of you who conceive the building project long before it is a physical reality—indeed, before even a line of design is drawn. And to those of you who, after the building is constructed, use it in giving service to the occupants, it is certainly the dominant fact.

Therefore, I ask you to agree with me at least for the purpose of this talk, to consider the planning of a building from the standpoint of the service required of it.

Accepting this conception, it naturally follows that *operation* really means “use in rendering service” and the title of this talk, therefore, becomes

“PLANNING OF BUILDINGS FOR USE IN RENDERING
SERVICE WITH ECONOMY”

DEFINING SERVICES

The first step precedent to the planning of the building is to define the services to be rendered. Some of the general types

are office, manufacturing, warehousing, habitation, and the special types—electric power generation and distribution, telephone switching, entertainment, and religious. Several of these services may be grouped in the same building.

After the general type of service is determined, the particular characteristics must be defined. If for office uses, it is necessary to decide upon certain population factors; for example, density:—that is, the number of square feet of yield area required for each occupant, and the habits of the population as to times of arrival and departure. Both of these factors have a very definite influence on the capacity and character of the elevator service; on the toilet facilities, and on the exit capacities.

This may be termed the qualitative determination, and in part answer to the designer's question: "What kind of a building do you want?" It is similar to your answer to the stationer when you want to buy a pencil. You require a pencil for marking on blue prints, we will say. The stationer, if he knows his business, will sell you a yellow crayon pencil because yellow marks on a blue background are easy to read.

Likewise other qualities of the service must be defined, some in advance of the design and others during its course.

The next step is to determine the quantity of service: that is, how much or how many square feet of yield area should be provided for each type of service, and what the total amount should be. In some cases, the quantity of yield area may be the maximum amount that can be developed on the particular plot within the limits of economy; that is, the demand may be great enough to absorb all the space which can be provided in the particular location. In other cases, the quantity may be limited by the demand and be less than the economical amount from other considerations.

CLASSIFICATION OF SERVICE

Inasmuch as a building is a complex structure, it will be easier to study the design if we break up the service into the elements corresponding with the usual structural and mechanical parts. Generally speaking, the services which a building is designed to render to the occupants, comprise the services of support, security, access, comfort, transportation, and appearance.

The service of support provides for carrying the loads due to population, furniture and machines, and goods and materials. The elements of the structure which function are the foundation, the columns, the floor structure, piers and walls.

The service of security provides protection against animal entrance including humans, weather, fire and dirt. The building elements which function are the walls, floors and roofs.

The service of access provides for movement into and out of the building, and throughout the interior both horizontally and

vertically, both for population and materials, and for escape of occupants in emergency. The building elements functioning are the stairs and ramps, shafts and hoistways, corridors and halls, including doorways.

The service of comfort—(from the standpoint of necessity rather than luxury)—provides for wet and dry cleansing; illumination, natural and mechanical; air-conditioning, both natural and mechanical, as to temperature, moisture content and movement; and the opportunity to look out. The building elements which function are the plumbing system, interior surfaces, windows, skylights, and the lighting system, heating and ventilating systems, windows and doors.

The service of transportation provides for the mechanical transport of people and goods, generally vertical except in the case of industrial buildings. The building element functioning is the elevator system.

The service of appearance—not only to the occupants, but to the passers-by—is rendered by the masses of the building grouped and accented and ornamented, the exterior surfaces as to color and texture, and the interior surfacing as to color, texture and ornamentation.

In addition to these services which are rendered to the occupants through the agency of the building, there is another class, comprising those services which a building or its parts may be said to render to itself. I refer to self-protection from fire and the other elements of destruction and deterioration.

RESPONSIBILITY FOR SERVICE DETERMINATIONS

Who is responsible for these determinations and where does the designer come in? This question may be answered after a brief consideration of the functions of the human elements of the building industry classified by the dominant characteristics of the service normally rendered by each one.

The first category, I should call INVESTMENT, including the Owner and the Building Manager.

The second category—DESIGN—comprises the Architects and Engineer.

The third category—CONSTRUCTION—includes Contractors and Sub-Contractors.

The fourth category—LABOR—includes the wage workers, both skilled and unskilled, union and non-union.

The fifth category—MATERIAL SUPPLY—includes the material dealers and manufacturers.

Considered chronologically, these groups form a circle beginning with the Building Owner, who makes the first service and financial set-up of the project—the Architect, who designs—the

Contractor who erects—the workers who put the materials together—the manufacturers who fabricate the several parts—and finally, closing the circle, the Building Manager, who operates the completed building to give the services specified and to obtain the financial returns. All of these elements play an important part in the project, but none of them absolutely dominate the control. Hence it is important that the responsibilities of each should be realized.

Logically and according to normal practice, the basic service characteristics of the building should be determined by the investment element, and the design element should be responsible for translating such requirements into terms of building. The Owner or Manager should specify what he wants to purchase in building service, either for his own use or for re-sale. The Architect and the Engineer should plan the structure to give such services.

AN ILLUSTRATION.

My interest as an architect lies in the category of design, and from that standpoint I propose to give some facts of interest developed in a recent study of a building project which has followed the outline I have just given and will serve to illustrate a logical method for planning a building for use in rendering service with economy.

This study was made jointly by three of the industry elements described above:—investment represented by the Owner and his building manager; design by my firm as architects and our consulting engineers, Messrs. Moran, Maurice & Proctor for foundations, and Meyer, Strong & Jones for mechanical equipment; and construction by Todd, Robertson, Todd Engineering Corporation for cost estimates.

SERVICE REQUIREMENTS.

On a lot approximately 200 x 250 feet, with streets on all sides, it was desired to develop 435,000 sq. ft. of yield (net) area for machines and operating purposes and not to exceed 285,000 sq. ft. for office purposes, the latter area to be limited in quantity by economic considerations. Furthermore, storage space was required in the basement and retail store space in the ground story.

The various services were further defined as follows:

Support—To provide for live loads varying from 150 to 175 lbs. per sq. ft. in clear stories of 13 to 15 ft. in the machine sections. In the office sections to provide for live loads of 60 lbs. per sq. ft. in clear stories of 10 to 11 feet. Construct foundation safety to support building with precaution to insure against outside disturbances, due to tunnel, subway or other sub-grade construction work in the vicinity.

Security—To provide the usual precaution against animal en-

trance and dirt with special precautions against weather, because of the severe exposure of the site, and highest form of fire precaution, because of the importance of the machines and service dependent upon them.

Access—To provide ample means for movement into and out of the building and throughout the interior for a large population and considerable quantities of material, including heavy machine units. Provide adequate means for the escape of the occupants in an emergency.

The population density was fixed at 80 sq. ft. to 100 sq. ft. (averages) per person in the office section, with a very much lower density in the machine section.

Comfort—Provide the most economical means for cleansing, illumination, heating and thorough artificial ventilation in areas of dense population, and in spaces without adequate natural ventilation.

Transportation — The population to be carried to various floors with reasonable speed and economy (see Mr. Jones' paper for the details of this service).

Appearance—Both interior and exterior to be dignified, rather plain with no suggestion of pretentiousness, but rather to give an impression of commercial service.

Construction methods to be followed and materials selected to give a long life to the building with a minimum of maintenance and replacement costs.

QUALITATIVE DETERMINATION OF DESIGN.

There is not time to describe all of the structural elements of the building designed to give the foregoing service. Mr. Jones' paper covers many of the interesting features connected with the electrical work and the elevator system. The other elements of the structure follow designs which have been used in other buildings with satisfaction.

It will be interesting to state, however, that in the final design (36 stories) determined as the economic size, the construction costs for the various services, stated in percentages, are as follows:

Support	34%
Security	18%
Access	1%
Comfort	27%
Transportation	12%
Appearance	8%
	100%

QUANTITATIVE DETERMINATION OF DESIGN.

In this study, the most interesting problem was to determine the quantity of space that could be produced within the limits of economy and the results, I believe, are worthy of presentation to you.

Two tests for economy were set up. The first was based on the theory that the quantity of space (number of stories in building), which would show the least annual cost per square foot of yield area, would determine the size of the building, making no distinction between machine area and the office area. The second test recognized that the quantity of machine space was determined by other than building considerations and, hence, the test of economy should be applied to the office area only. Under this test, the limit of economy would be reached when the annual cost per square foot of yield area equalled the cost of producing equivalent area on another lot.

As a matter of fact, the recommendations for the size of the building were determined by the second theory, it being considered that the first theory was not tenable because of the mixture of two very different kinds of service; that is, heavy loads and high stories for the machine areas against the lighter loads and lower stories required for office purposes.

After careful study and consideration of the factors affecting the cost of producing space of equivalent value on another lot, it was decided to set a limit of \$2.75 annual charges per square foot of yield area for the office section considered as superimposed upon the 12-story machine section.

The procedure of the study was as follows:

1. The building was designed for a quantity of area believed to be well beyond the limit.
2. Four alternate buildings, each of smaller area, but all of the same character as the original, were designed, being respectively 12, 16, 26 and 36 stories in height with yield areas shown in Figure 3.
3. Construction and operating cost estimates were made for each building and reduced to annual charges per square foot of yield area. For results see Figures 4, 5 and 6.
4. The limit of \$2.75 fell between the 14-story added section and the 24-story section—hence the economic height was between the 26-story and the 36-story buildings. A sixth design was then made and estimated to determine this height.

In the re-study of the design (stage 4) it was found possible by a rearrangement of the core area (containing the stairs, elevators, toilets, etc.) and a different scheme of elevators to considerably increase the yield area (see diagram X-3, Figure 4) without a corresponding increase in cost.

The final determination and recommendation was for a 36-story building showing an annual cost per square foot of yield area slightly less than the limit set. The real determining factor was the number of elevators. Two banks (C and E, Figure 2) of eight cars each, were required to serve the office section, 13th story and above. More elevators could not be installed without serious loss of area and consequent increase in annual charges. Hence the height limit was reached when the capacity of the two banks of elevators was reached.

Some of the detail results of the study are given in the following figures. Read from a comparative standpoint, I believe, they are of real general interest.

(See Page 152)

FIGURE 1. SCHEMATIC PERSPECTIVE.

Letters indicate the sections separately estimated called the "added sections" considering the 12-story building as the base. In the cost of each such section, i. e., the B section 16th to 26th stories—was included the increased costs in the sections below due to its addition—the costs of the "roots."

Note the setbacks required by the zoning law; particularly the main one at the 16th story, where the tower section begins occupying 25 per cent of the lot area, the maximum allowed by law giving a building about 110 feet square.

The absence of courts in the machine section (12-story building) and hence large areas with minimum of enclosing walls made for relatively low costs.

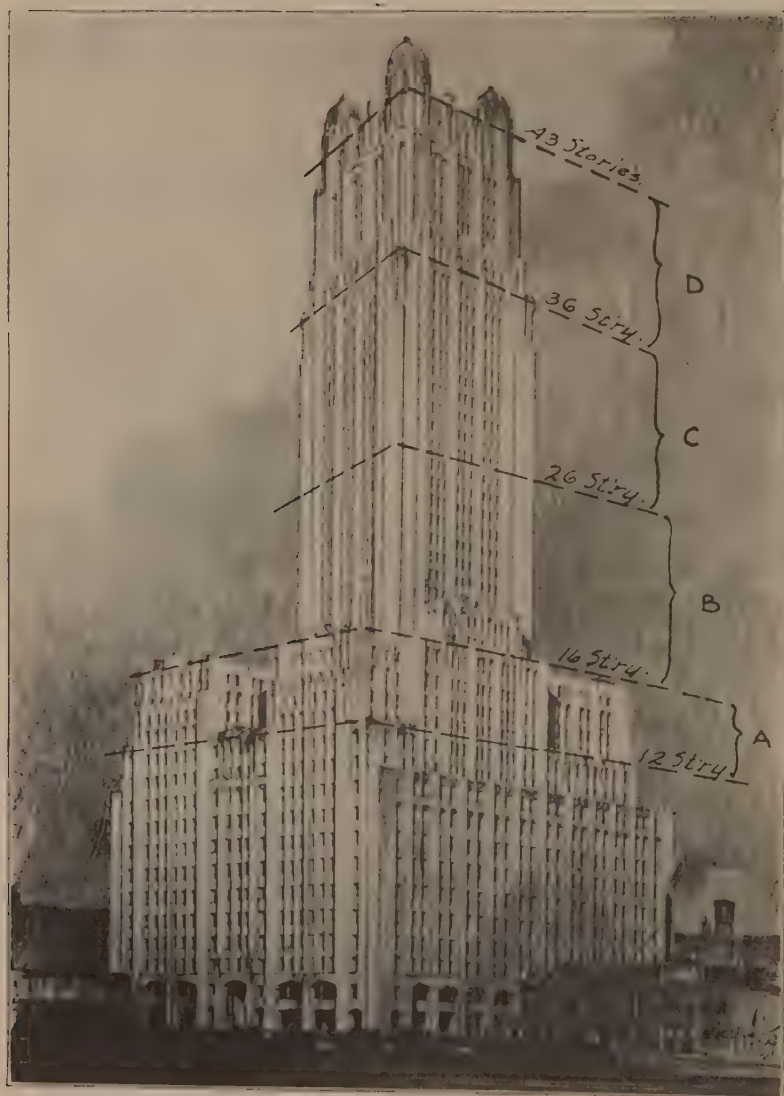


FIGURE I

Fig. No. 2.

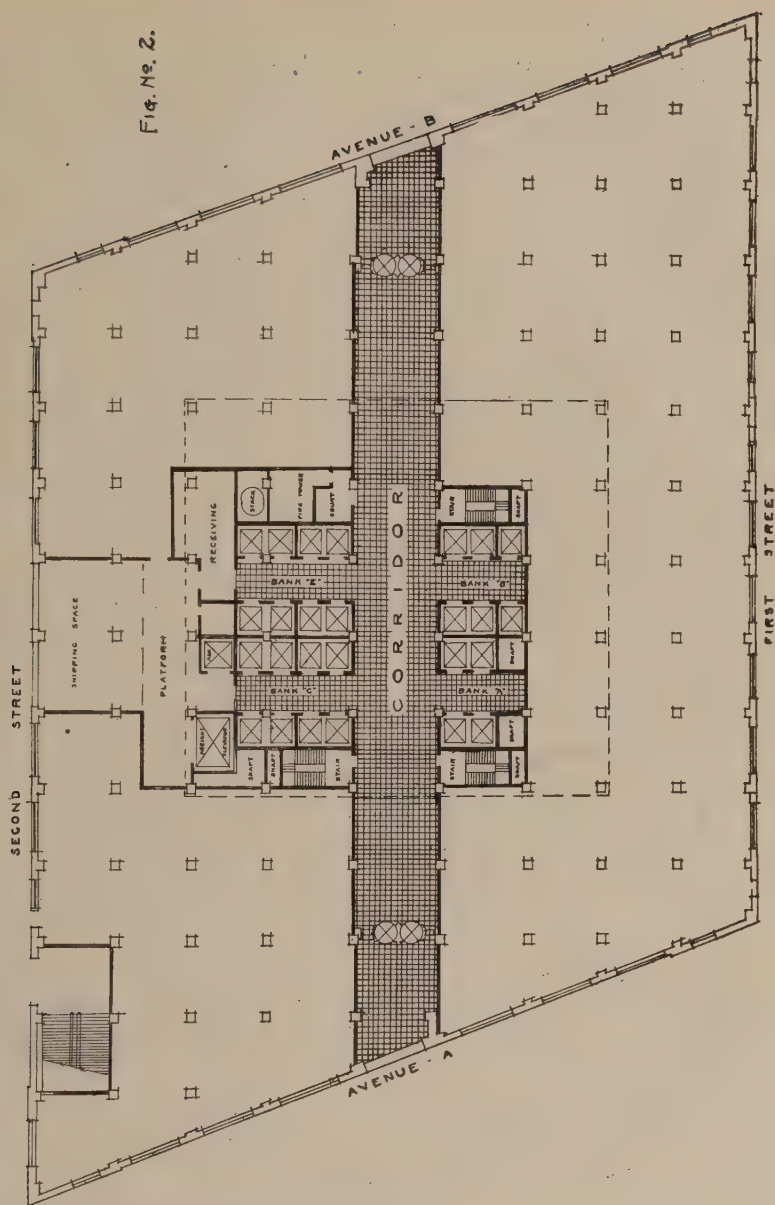


FIGURE 2. FIRST STORY PLAN.

This drawing shows the general scheme of the interior. The core area continues throughout the entire height diminishing upward. Two banks of elevators A and B end at the 12th story; bank C serves 13th to 19th and bank E, 20th to 36th stories.

Two stairs stop at the 16th story and one interior stairs and one fire tower continue to the top.

Note the access provisions for both people and freight.

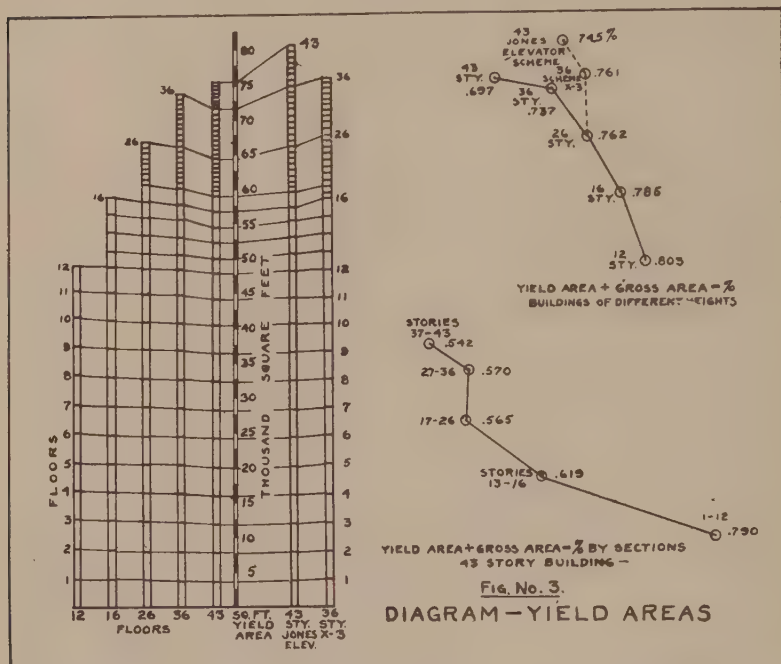


FIGURE 3. YIELD AREA DIAGRAMS.

The height rod ("altitude gauge") is divided into units of yield area and not number of stories. The quantity of yield area is the basic factor in the whole study. Trace the story lines (indicated by numerals) across the diagrams to realize the effect of height on area. The diagrams to the left of the rod give the areas for the five buildings studied in the first and second steps previously described. Those to the right show the re-studies, X-3 being the building finally determined as meeting the limitations set.

The percentages of yield to gross areas for both the several buildings and the various added sections are shown in the right of the figure. Note the sudden drop beyond 36 stories.

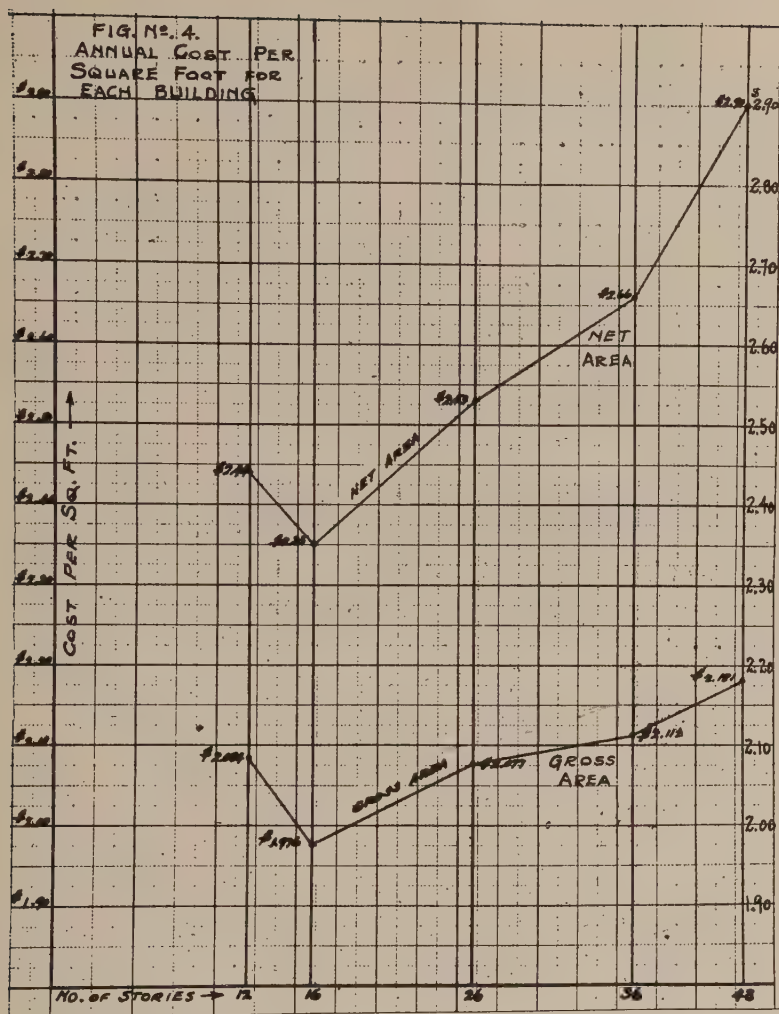


FIGURE 4. ANNUAL COST PER SQUARE FOOT FOR EACH BUILDING

In Chart 4, the "dip" at the 16-story building would make that as the economic height under test number one described in the text. This, however, was not the determining test as previously explained. Note the rapid increase in rate beyond the 36-story building particularly in the net (yield) area line due not only to increased cost of construction, but more to loss in yield area.

FIG. No. 5

DIAGRAM SHOWING COMPARISON OF ITEMS MAKING UP ANNUAL COST PER NET SQ. FT. IN THE VARIOUS BUILDINGS CONSIDERED.

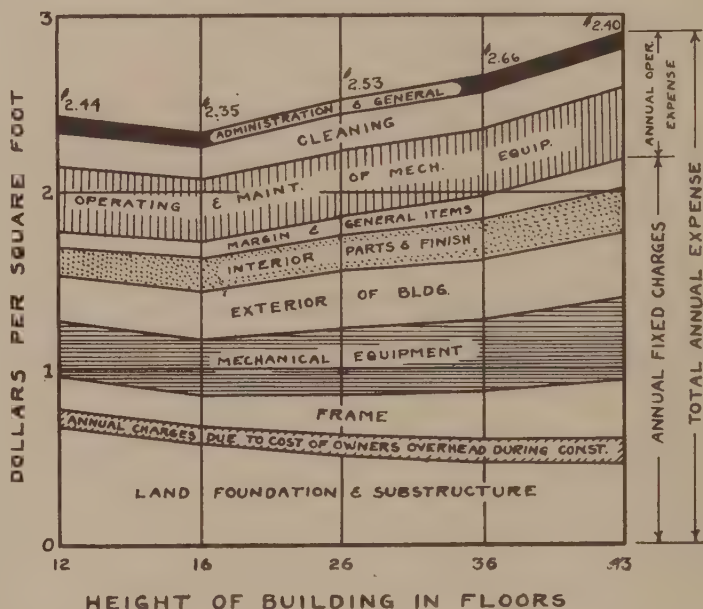


FIGURE 5. COMPARISON OF ITEMS MAKING UP ANNUAL COST

Figure No. 5 includes Margin, Supervision, General Labor, Materials, etc.

INTERIOR includes Light Iron, Interior Masonry, Plaster, all other interior finish and trim.

EXTERIOR includes Exterior Masonry and Stone, Windows and Glazing, Roofing and Sheet Metal, and miscellaneous exterior items.

MECHANICAL EQUIPMENT includes Elevators, Heating and Ventilating, Electric Wiring, Plumbing, Refrigeration and Sprinklers.

FRAME includes Steel, Arches and Fireproofing.

All items of the *fixed* charges increase with increased height except those due to land, foundation and substructure. Obviously the land cost was a constant amount and its effect on the annual

charges diminished as the area developed increased. The foundations were designed to be carried down about 60 feet to rock by the caisson method and their size was determined more by construction requirements than by the loads to be carried.

Note the effect of structural steel and elevator costs as the height increased.

The fixed charges are about three-quarters of the entire annual charges and are based on the constructions with the exception of the land cost. This indicates the importance of thorough

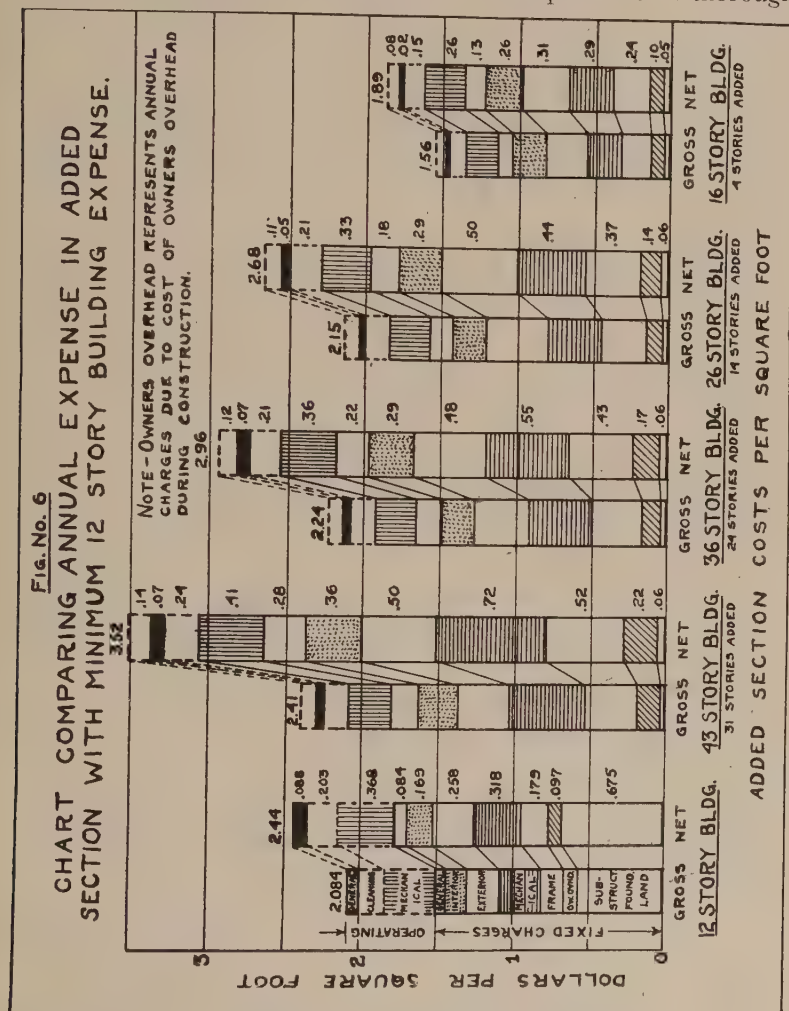


FIGURE 6. COMPARISON OF ITEMS OF ANNUAL EXPENSE IN THE "ADDED SECTIONS"

studying of service requirements, careful and competent designing and economical construction.

The balance of the annual charges, one-quarter of the whole, for operating is largely in the control of the building manager provided he has been given an efficient instrument, the building, for use in rendering service to his clients, the occupants of the building.

Fig. 6 gives information on costs of added sections (12-story considered as the base section) similar to that given by Figure 5 for the several buildings each considered as an entity and not an aggregation of sections. Note again the relative amounts of fixed and operating charges.

THE PRESIDENT: If as President of this Association for the last year, I made no other contribution to this Association, I feel as if I have done my full duty in being able to secure Mr. Voorhees' valuable contribution to the records of this Association. (Applause.)

THE CHAIRMAN: It seems to me there is a vital interest in this paper from a standpoint which perhaps has not been emphasized in the talk. There is, in a great many of our cities today, a zoning movement. One of the first questions is, how low they can reduce the height of the down-town structures. If you are going to prevent zoning commissions from taking away your earning power, you must establish the maximum height of office buildings. I think we have gained valuable information on this point.

MR. VOORHEES: If you will add to that, the supposition that we require no natural light or air but will provide our ventilation and light mechanically, there is no question that the limitations of the zoning law are very serious. However, if we have the right to build to the full area and everybody else has the same right, we lose in service so far as the comfort of the occupants in the lower part of the building is concerned when depending upon natural light and air.

THE CHAIRMAN: What would you say as an average was the maximum height to be fixed on a zoning law? Some cities give it as 100 feet, some 250, and some higher.

MR. VOORHEES: The New York law is based on a certain number of times the width of the street, varying from three times to one. Buildings on a street facing the river might be higher than the buildings on the next street back. I think it is rational they should be set on a slope line.

E. EVERETT THORPE, New York City: I might ask if the size of the lot hasn't a great deal to do with the height of the building?

MR. VOORHEES: When we get in the tower section, we would be running against our limit very quickly, because our yield area falls off.

MR. THORPE: Have you figures on the minimum size of a lot on which you could build a 43-story building?

MR. VOORHEES: I am not able to answer that. It requires study. No matter how large the lot, the criterion is the carrying of your people to the various levels. The more people, the more elevators. I cannot say a 43-story building would prove economical. Every time you put an elevator in you not only cut out 150 square feet on the particular stories it serves, but all the way down through the building.

RAE T. SMITH, San Francisco: I wonder if you have made a study of inside toilets?

MR. VOORHEES: We think an interior toilet mechanically ventilated and lighted is better than one on the exterior not properly ventilated. It is the practice largely in New York.

MR. SMITH: What was your total rentable area?

MR. VOORHEES: In the 36-story building it was 700,000 feet.

MEMBER: I would like to ask about going to high buildings. Don't you take a less unit for each elevator?

MR. VOORHEES: The elevators were not figured that way. They were figured on the actual job of carrying a certain number of people in a certain time over a certain distance.

THE PRESIDENT: I do not believe that the man who is now to address us graduated from grade school. I know he did not graduate from the Stevens High School, because he hit the principal with a wad of paper. When Mr. Jones finishes with this paper, you will find he is educated in this line of work. He is a self-made man. We building managers have no school to attend, but we must make ourselves through our contacts and by application. I take pleasure in presenting Mr. Bassett Jones.

Recent Developments in the Electrical Equipment of Buildings as Affecting Economy in Operation: First, Distributing System; Second, Elevators; Third, Illumination

Bassett Jones, Consulting Electrical Engineer, New York City

Mr. Coley and I were in public school and we went through Stevens School together. He succeeded in getting through the Institute of Technology. We have been close friends since we were in knee breeches, so anything he says about me does not count. I want you to know what the personal situation is. He is always throwing butter at me, and sometime I will hit him with a rock! (Laughter).

I

Today the electrical loads in modern office buildings in New York and Chicago have passed that of a large factory installation. The average load last year in one large office building in New York was 2.75 watts per square foot of yield area. In some special cases in New York the connected load in an office is 5 watts per square foot of yield area. Two watts per square foot of manufacturing area is a good average load for a busy diversified machine shop. In a large turbine shop the average load is 1.7 watts per square foot of manufacturing area.

For purposes of determining plant feeder sizes and distribution, the load in a building may be conveniently divided into (1) general building lighting; (2) miscellaneous power, consisting of pumps, fixed ventilation, refrigeration, compressors, etc.; (3) elevators; (4) tenants' load.

The general building lighting is a more or less fixed thing, including toilets, halls, plant, etc., and is commonly relatively small. The miscellaneous power may be of considerable amount, but is generally more or less fixed and can generally be determined with sufficient accuracy from averages obtained from load records. The elevator load is the principal variable load. Its determination is a mathematical problem in probabilities. (See The Determination of Resultant Input From Individual Duty Cycles—Jones, in A. I. E. E. Journal, Vol. XLI, No. 5, May, 1922, or General Electric Review, Vol. XXV, No. 7, July, 1922.) Its determination from load records is not accurate, because it is generally the elevator load that determines peak loads and peak frequency, and because its r. m. s. (root-mean-square) or heating value is materially greater than its average value.

The tenants' load is generally determined from records. This may do for the building as a whole, but not for specific regions over which it may vary widely.

The tenant load in office buildings varies from year to year just as in a factory. If one should take a photograph of a floor in a live, well-run factory every day and convert it into a moving picture, one would have a picture of machines traveling and moving—the whole machinery in constant flux, and new machines being brought in to replace old ones. For two years a certain portion of the building is an assembly room, for three, a drafting room; then a room used for storage, and first or last, manufacturing area.

It is the same way in office buildings. We get a big industrial corporation in a building. It fills the office with motor-driven office machinery. In two years this tenant moves, or a year later they rearrange the whole department. Say we have a heavy load from the sixteenth to the twentieth floor. Five years from now it is out, and we have our maximum load in the twenty-second to the twenty-fourth floors. So the problem of distributing systems for tenants load in office buildings is the same as for a railroad or factory building. We have a shifting load to take care of. We cannot build in anything permanently unless we wish to put in cable enough so that any floor can have the maximum load, and that is bad economics.

Obviously the keynote in the design of electrical distributing systems either in an office building or factory is flexibility. Flexibility can best be obtained by the use of standard units of equipment that can be moved or reinforced as the demand varies. (See "Standardized Flexible Distributing Systems—Jones, General Electric Review, Vol. XXI, pp. 276-285.) Without such flexible systems, you know what the cost of tenant changes amount to. Not ten years ago in New York it was common for the contractor's final bill to be 100 per cent more than his original contract, solely due to tenants changes. In one of the buildings recently built where a flexible system was used, the contractor received 12½ per cent over the original price, saving the owner approximately \$30,000.

This distinction between flexible and inflexible distributing systems may be illustrated by the difference between what I have called in another place, the Trunk System and the Fan System.

In the Trunk System the device outlets are generally all located at the end of stub or "tap" conduits radiating in groups from properly located and distributed junction outlets or tap outlets on which devices are never installed. These junctions or tap outlets are all joined by a single line of pipe—that is, they are strung along this pipe at suitable intervals. This pipe, of larger size than the tap conduits, is called the "trunk." Through it several circuits may be pulled. From occasional tap outlets, say every

third or every fourth, a "home run" conduit of the same size as the "trunk" is run to the distributing center. Thus from every tap outlet there are at least two routes by which a circuit may be run to the distributing center. One or more tap outlets may be fed by one or more circuits, which arrangement can be changed at any time by re-routing or re-connecting the circuits in the trunk. Changes in the location of device outlets merely entail cutting a short distance back along the tap to the tap box and re-routing. New device outlets can be installed anywhere at the expense only of cutting in new tap conduits to them from the nearest tap outlet.

It is usual to install the home-run conduits, trunk conduit, and tap outlets as a permanent backbone of the system even before the location or number of device outlets are known. This saves time and cost all down the line.

The principle of the trunk system can be applied to feeder layouts, branch circuit layouts, and to signal layouts.

In the Fan System, on the other hand, the home runs radiate from the distributing center to outlets from which branch conduits radiate to device outlets—there is no trunk tying together the spokes of the fan, and changes can only be made at the cost of extensive cutting and re-arrangement. The Fan System is the distributing system most generally used. It is about as unintelligent a method of distribution as could well be devised.

II

And now, a little about elevators.

Before I go further, let me answer a question put to Mr. Voorhees regarding the proportioning of elevators on the basis of square feet yield area. This is a perfectly illogical and senseless method of attacking the problem. Yield area has nothing to do with the number of elevators. And let me say here—get yourselves out of the way of looking at things from the viewpoint of precedent. Too many of us have crystallized mentalities. We have mental sclerosis—a hardening of the mind. (Laughter.) We go by habits, not by forethought. We are ruled by our ancestors. We are like the Chinese. We will never get anywhere that way. The men who have helped us to advance are the men who were not afraid to do new things in new ways. They were the pioneers who fought the Indians—and there are lots of Indians in the building business. (Applause.)

I will now show you the general steps in determining elevator equipment. The only use I have for yield area is to determine the number of the elevators I have to handle. Suppose we are considering a building on Wall street occupied by bankers and brokers. Let us assume the population density to be determined at 90 square feet per person. Let us assume that on that basis there will be 3,000 people in the building. Now we are

through with yield area. We are to get 3,000 people into that building and out again. What shall we take as the traffic distribution? You see we are approaching the matter as a railroad problem. Let us say that in buildings of this class observations have shown that we may expect one-third of the population to arrive in 15 minutes, and that the maximum peak will probably be 14 per cent in 5 minutes. In other words, 1,000 persons will arrive in 15 minutes and 420 persons in the worst 5 minutes. These people must be moved from the ground floor in that time.

But in this class of building we cannot ask the passengers to wait more than 20 seconds for a car, or they will feel that they have been delayed. It is the same way getting out. An important man rushes out of his office and must get on the floor of the Stock Exchange. He pushes an elevator signal and waits 45 seconds by his watch! The owner knows it the next day, and he will move right out! (Laughter.) He must be on the floor of the Stock Exchange two minutes after he closes his desk. He must have an elevator every 20 seconds. So we will take 20 seconds as our car interval. Thirty seconds is considered a fairly long interval in New York. The interval is largely a matter of tenant psychology. In 300 seconds or 5 minutes 15 cars leave the ground floor. But we must get 420 people away in five minutes. That works out at 28 to the car. It can't be done. They could not get into the car even in 30 seconds, and we must take at least five seconds out of the interval for the gates and doors, leaving a net 15 seconds for loading time. If you have a good, sharp starter, he can load a passenger a second, so we can use a 15-passenger car to handle the peak business. Thus we determine the size of the car and its working load.

But we have 417 people to get away in 5 minutes in 15-passenger cars. This requires that 27.8 cars leave the ground floor in 5 minutes, of which 15 leave in each bank, requiring two banks of cars. So we have settled the number of banks and the size and loading of the cars.

On account of the fact the population has a habit of shifting, we will overlap these banks so that the building manager will be able to vary the number of floors fed by each bank as the conditions require.

The next step is to determine the number of cars required in each bank to maintain the interval. Assume each bank feeds 10 floors, then the question becomes how fast can a car make ten floors in both directions including the probable number of stops? We have 15 passengers to get off. Will the car stop at all floors? Probably not. But we must also keep the maximum condition in mind that some time it probably will make all the stops. What is the best probable number of stops to use? Here again we have recourse to traffic studies and stop frequencies, requiring some judgment in application. Let us pick out 0.8 of the number of

landings on up motion as the best probable selection, and no stops on the down motion (during morning arrival traffic). Assume that the hoist is 125 feet, ground to 10th floor. The car will stop (best average) at 0.8×10^{-8} floors on the up motion. Thus it will, on the average, make 8 jumps from stop to stop averaging 125/8-19 feet each. The question now is, in how little time can this be accomplished?

Assume we are to give high-class quality of service, using 1.1 roping direct-drive hoisting engines, the cars reaching a maximum velocity of 600 feet a minute from standstill in 5 seconds using resistance controller—we might select 700 feet a minute attained in 3.5 seconds with voltage control. Even 800 feet per minute, or above, attained in 4.0 seconds, can be used with voltage control, auto-leveling and push button operation, depending on what we are willing to pay and upon what such refinements will save us in reduced number of cars.

From the time speed data of such several types of equipment, we now determine the *running time* or the time the car is in motion during both up and down motion. To this we add the *standing time* or the time the car is standing still, gates and doors are being opened or closed, passengers discharged (or taken on) to which is added the interval or the time the car is standing at the ground floor. Next, *the lost time*—time of slow down in limits, synchronizing time, false stops. The sum total is the *round trip time*, which, divided by the interval gives the number of cars required in the bank.

We have spoken above of cars reaching 800 feet a minute or more—this can be accomplished with perfect comfort to the passenger and the acceleration time cut to 4.0 seconds or even less if the acceleration is of a predetermined character. Physiological comfort is solely a matter of acceleration and not at all of velocity attained. Such acceleration cannot be attained by resistance speed control. Voltage control then becomes essential. But cars reaching these speeds must be automatically stopped—and even automatically started—requiring push button operation, and auto-levelers. They are costly refinements, but when two or more cars can be eliminated in a bank by their use, they prove economical.

These are the present tendencies in elevator equipment particularly in tower buildings such as the zoning laws compel.

III.

Now I wish to spend a few minutes with you on the subject of illumination—all I can do in the brief time at my disposal is to give you a somewhat hasty summary of the methods coming into more and more frequent use in the design of the electrical equipment of buildings. These methods, being based on the more fundamental aspect of our problem, both as to physics as well as eco-

nomics, tend to produce a more useful equipment of higher over-all economy—the economy which, as Mr. Voorhees has pointed out, deals with an output measured in terms of service.

So in problems dealing with illumination, I shall ask you to step with me back of the scenes a little, so that we may discover just what we are seeking to accomplish by the use of light, natural or artificial. Obviously we wish to make it possible for the tenants of our building to see so that they can do their work properly. Seeing is a function of the eye, so, if we are to determine on a suitable system of illumination we must be controlled in our design by the requirements of the eye in normal use. Our primary data is primarily the data of physiological optics—not of physical optics or of physics, although these two latter follow in their proper order.

The distinction I wish you to make may be illustrated by a comparison of the value of photometer measurements and measurements of visual acuity or the case of visually distinguishing objects—such as the letters on the printed page or the finish on a machine product under manufacture. Obviously any system of illumination that does not meet the latter requirements, no matter how high its utilization or energy efficiency as measured by the photometer is of no value.

Imagine the following test of such a system of illumination. It consists in reading printed matter on a white card for a period of two minutes, with the eyes shaded from the light sources. Then exposing for a like period the eyes to the light sources as they will normally come within the field of vision, and lastly again reading the printed matter. If, on the last test, there is experienced any difficulty in reading, any effort required in focusing the eyes on the type, any blurring of the image, the system is fundamentally wrong, no matter what the photometer may tell us about it. This is a good though rough working test. One I always use myself before I bother with the photometer.

The eye sees by gradations in brightness—and therefore the brightness gradations best suited to the eye are the required criteria of illumination design. The proper range of such brightness gradations are certainly much smaller than those found in common practice. Therefore in most illuminating installations the eye functions under strain and at reduced efficiency. The marked effect of eye-strain in lowering general bodily well being and vitality is well recognized.

I am never tired of citing the little recognized criterion of illumination design set up by Dr. H. E. Ives some years ago, "The art of good lighting is the art of the proper distribution of brightness." Given a proper brightness distribution we must see well, provided we have enough light to see by; but no amount of light will enable us to see well if the brightness distribution in the field of view is wrong.

The data for the art consists in the numerical values set upon brightness gradations. After selecting a proper set of brightness gradations for any particular case, then we may select light sources that, in the interior to be lighted, will give us the nearest practical approximation to these, and not some other set of brightnesses. In this study we must consider the brightness of ceilings, walls, sky lights or windows—if it be day lighting—and of the field immediately surrounding the work to be done, also the brightness of the work, say of the paper as you write and of the surrounding desk surface. The relative size of the bright areas, as well as their relative brightnesses, is what counts. The contrast in brightness between these areas is an important quality in determining visual efficiency. Thus, to illustrate by extremes, a lighted match in an otherwise dark room is blinding, but a bare 1,000 watt Mazda in a white room is not nearly as annoying. The background is very bright and the contrast not as great as that of the match flame against a dark background.

This much for the fundamentals of the problem—you see it is quite a different picture from that drawn by most lamp and fixture salesmen with whom you have done business.

Now consider the nature of light. It is a form of radiant energy—like heat from the steam radiator. If we put a radiator in a room and carefully heat insulate the enclosure so that no heat can escape, the heat emitted by the radiator accumulates and the room rises in temperature until the heat losses throughout the walls, floor and ceiling just equal the heat emitted by the radiator. Then the room temperature ceases to rise.

So with a lamp. If we light insulate the enclosure by covering the walls, floor and ceiling with light reflecting substances such as white enamel, the light accumulates until the light losses by absorption just equals the light emitted by the lamp when the brightness of the interior surfaces as seen by the eye ceases to increase. This is the logical basis for the determination of the quantity of light that must be emitted by the lamps in order to maintain the interior surfaces at any desirable brightness. Obviously the quality and color of the finish used on interior surfaces is of great importance. More than anything else, it determines the amount of energy in watts required to maintain a given brightness distribution and intensity of illumination—more so even than the efficiency of the particular fixtures selected—assuming, of course, that reasonably efficient fixtures only are considered. A difference in the quality of the paint used on the walls and ceiling—particularly the ceiling—may mean 50 per cent difference in the working illumination, but it would be hard to find two modern well designed lighting fixtures differing in efficiency by any thing like this amount.

In connection with day lighting I wish to draw your attention to the extremely low efficiency of the window and to its

extremely high cost. Generally the window introduces brightness contrasts way beyond any estimated safe limit. (Usually taken at 100 to 1, which the window often produces contrasts exceeding 1,000 to 1). Further, the larger the window the worse is the glare produced by it, for glare is a function of surface area as well as of surface brightness. The window costs to build and install about twice the cost of the equivalent wall area. The heat transmission even through a reasonably air tight window is about five times the heat transmitted through a 20-inch wall of equal area, ordinary exposures. Taking all these factors into account, increased first cost of window, increased first cost of radiation and connected piping and plant, together with increased annual costs of depreciation maintenance, cleaning and coal, it can be easily shown that artificial color corrected high intensity illumination of high quality—better for the eye in every way than the natural light as distributed by the window—can be furnished at a lower annual cost than the window. However, the window is necessary from a purely psychological standpoint—and for ventilation people are not happy in rooms without windows. But the smaller the window the better off we are. Yet think of the extraordinary mistake that has led us to build factories with glass walls! And to greatly increase the cost of our buildings by introducing nearly useless “light courts.”

If, in what I have said, I have given you a slightly new slant on some of your problems, I shall indeed have accomplished all I hoped. I thank you.

THE CHAIRMAN: I am sure you have been inspired by the vision of the coming office building given us by the two speakers of the morning.

Report of Committee on Research

Colonel Gordon Strong, Chicago, Illinois.

Mr. Coley asked how long it would take to deliver this report. I said, "Five minutes." He said, "You can have two and a half." This paper in my hand is the report. I am not going to read it. I am going to suggest that it be printed in the proceedings of the convention, if we print any proceedings. If we do not, I will take it up with the editor of "Popular Mechanics" and see if it complies with the advertising policy of that paper. If he won't let it in, it will appear in the domestic science department of the "Ladies' Home Journal"! (Laughter.)

The present outbreak of research work dates back only to the last meeting of the Board of Directors. I advised the Board that I was about to employ a skilled mechanical engineer. And that he would do some research work for our office. I suggested that I should be glad to have this done through the Committee on Research, as a matter of mutual benefit. The suggestion was adopted.

We decided to start on the subject of radiator traps. This is a very small and inconspicuous object, far from unimportant. For example, we found that in one building in Chicago they had been burning twenty-seven tons of coal a day. They fired the manager. That, of course, is the start of all improvement. (Laughter.) The new manager fired the engineer. The new engineer put in some new radiator traps and their coal consumption diminished to seventeen tons a day.

The tests are going on. We have a standard equipment, and are testing new traps and old—this year's and last year's traps—traps with dirty water and traps with clean water. We shall send out a return postcard to ask you whether you want to receive a copy of our report, containing the results of these tests. So from now on you will instruct your secretary not to let any postcards come to your desk. Not having this report printed will make a saving to your Association. (Laughter.)

We can make a further saving by limiting the costumes the young lady swimmers are going to wear this afternoon. (Laughter.) Then, if we get down to the use of half a stenographer on alternate days of the week, we will save enough more so that we can send somebody out on the road to tell the world what a hair-curling, tail-twisting, blood-curdling, rip-snorting, whang-doodle of a National Association Building and Managers we have! (Applause.)

• COMMITTEE ON RESEARCH NATIONAL ASSOCIATION OF BUILDING OWNERS AND MANAGERS
ANNUAL REPORT
JUNE 20, 1922.

• (1) ORGANIZATION.

The organization of this Committee was not completed until March 7, 1922, when the present chairman was appointed by the President and confirmed by the Board of Directors in session at that date.

Even when so organized this Committee could not function without a competent engineer to devote the greater part of his time to its investigations. On March 20th the Chairman was able to engage, upon the staff of his own office, a highly qualified engineer (Mr. B. K. Read); and arranged for him to give first consideration, and the greater part of his time, to the work of this Committee.

(2) OBJECTS.

While the objects of the Committee on Research are fairly well known to the membership of the National Association, they were not known to outsiders, particularly to manufacturers, whose co-operation is necessary. It was necessary to devise some "selling" literature.

EXHIBIT A is a brief statement of the objects and organization of the National Association as a whole. This was printed on the letterhead of the National Association, and distributed to all members of this Committee, and to all manufacturers with whom we have had occasion to correspond. It is intended to be used in the future as in the past.

EXHIBIT B is a more detailed statement of the objects and organization of the Committee on Research. This was printed on the letterhead of the Committee, and distributed in the same manner as Exhibit A.

EXHIBIT C is an extract from the circular letter of the Chairman to members of this Committee, of March 25, covering this matter of objects from a somewhat different viewpoint.

(3) METHODS—(In General).

It was, of course, necessary to determine a method of procedure, and important that this method of procedure should be right. Further, it was desirable that this method of procedure should, as far as possible, be uniform for all articles tested.

In a Memorandum on Reports in General, appended hereto as Exhibit D, is a statement of the method of procedure proposed.

(4) METHODS—(In Detail).

The first article selected for investigation was radiator traps.

The importance of this article, the absence of any definite information about the relative value of the different makes, and the conflicting statements of manufacturers, all seemed to point toward the desirability of a thorough and accurate investigation and an absolutely reliable report.

In a Memorandum on Ratings of Radiator Traps, appended hereto as Exhibit E, is a statement of the method of procedure proposed.

(5) CRITICISM.

In the Memorandum last referred to, it will be perceived that criticism of every sort, and from everybody directly or indirectly concerned, is heartily invited.

(6) RADIATOR TRAPS—MANUFACTURERS.

A list of twenty-six manufacturers was compiled from various sources by the Engineer of the Committee; all members of the Committee were requested to suggest additional names; the names suggested were found for the most part to be jobbers of makes already covered in the manufacturers' list, which was thus indicated to be exhaustive and complete.

A letter was addressed to each manufacturer, in the form appended hereto as Exhibit F, with Exhibits A and B as enclosures.

Up to date, out of the twenty-six manufacturers, only four have expressed themselves as willing to contribute their pro rata share of the cost of the tests which has been figured as \$50.00 per trap tested, proportionately less if more traps are included.

It would seem probable that many of the manufacturers declining to contribute are *not* unwilling to spend \$50.00 or less; but that they are unwilling to take any action which might be thought to constitute a recognition of such tests and of the resultant ratings. It would seem probable that their sales managers prefer to offer their traps by the usual selling methods rather than on a basis of exact and proven merit.

This is a situation that was to be expected; and that can be overcome only by the character of our reports and the recognition and support given them by our members.

(7) RADIATOR TRAPS—TESTS.

A standard and complete testing apparatus has been obtained by the Engineer of the Committee, on loan; and is now installed in the laboratory of the Lewis Institute of Chicago. The tests are now in progress. They are being supervised and vouched for by Professor Julius Wolf, Assistant Professor of Steam Engineering, in the name of the institute itself.

The tests themselves are of standard character, as practiced by the United States Bureau of Standards, various universities and the manufacturers themselves. They will be fully explained in the report of this Committee upon radiator traps.

(8) RADIATOR TRAPS—EXPERIENCE.

The actual experience of building managers in the use of radiator traps of various makes is being obtained, through the members of this Committee, from members of their respective local associations. The performance of each trap in the laboratory is being thus supplemented and checked by the performance of such trap in actual use.

(9) RADIATOR TRAPS—REPORT.

This Committee is already engaged upon a very comprehensive report on this article. The report will cover the following topics:

- (a) An outline of the several distinct *types* of steam heating systems, and the relation of radiator traps thereto.
- (b) A description of the several distinct *types* of radiator traps.
- (c) A showing as to each *make* of radiator trap to include:
 - (1) A drawing, of the Patent Office character.
 - (2) A specification, explaining the drawing.
 - (3) A statement of the various tests, experience and other facts and figures determining the rating of that make of trap.
- (d) A tabulation of the facts and figures of Sub-Paragraph (3) above, for all the *makes* investigated.

(10) CONCLUSION.

This Committee regrets the delay in the past which has attended its operations since its organization March 7th. This delay lies between the Chairman and the Engineer of the Committee. The members have taken prompt action upon the communications sent them.

As to the future, the report on radiator traps is expected to be in the mails not later than the end of July. And further reports, by the Committee of the coming year, if they follow the lines already laid down, will experience less difficulty and can be rendered more promptly.

Finally, this Committee is more than ever impressed with the great value of this line of work to members of the National Association. A single report, of the character above outlined, should be worth to each member as much as the annual dues of several years.

EXHIBIT A—(On Association Letterheads).

GENERAL OUTLINE

The National Association of Building Owners and Managers, a corporation of Illinois, is a nation-wide organization of the owners and managers of properties of the larger sort. Its objects (as expressed in its charter) are as follows:

To create, maintain and develop cooperation among building owners and managers; to facilitate the interchange

of ideas in the conception, construction, management, operation and maintenance of buildings; to promote the general welfare of the business.

The membership of the Association is of two classes:

(a) Affiliated local associations.

(b) Individual members in cities not having affiliated local associations.

The local associations so affiliated (on April 1, 1922), are as follows:

Members		Members		Members	
Atlanta	24	Denver	22	New York.....	250
Baltimore	23	Detroit	21	Oakland	7
Birmingham	10	Duluth	21	Omaha	45
Buffalo	22	Indianapolis	15	Portland	32
Chicago	76	Jacksonville	10	St. Louis	19
Cincinnati	35	Los Angeles.....	22	St. Paul	14
Cleveland	133	Louisville	18	Salt Lake City....	24
Dayton	28	Minneapolis	46	San Francisco	72
				Seattle	73

Total affiliated membership1062

The individual members (on April 1, 1922), represented 70 cities in addition to those above listed and totalled 240.

The National Association has been in continuous existence for fifteen years; and is steadily increasing in membership and in its forms of service to that membership. It has its Executive Office, in charge of a salaried Executive Secretary, at Chicago—Room 1127 Edison Building. The Association publishes a monthly Bulletin of its association activities and of professional papers; and an annual volume of Convention Proceedings.

The Association acts through its officers, its Board of Directors and its nine Service Committees. These Service Committees (on April 1, 1922,) are as follows:

Ethics	Taxation	Employment
Renting	Insurance	Purchasing
Legislation	Research	Accounting

Each Committee comprises a chairman, and one member in each affiliated local association.

EXHIBIT B—(On Research Committee Letterheads).

GENERAL OUTLINE

This Committee was constituted in July, 1920, to cover a field of work prescribed by the Board of Directors, from which the following are extracts:

(3) The organized, methodical consideration, still more the actual testing, of materials from the viewpoint of the building manager, has not heretofore been undertaken in any comprehensive way. It would seem desirable that the plan of work of the

Committee should be comprehensive. It should include materials which have been considered and perhaps tested from the viewpoint of the engineer, or architect, or fire or accident underwriter—but not from the viewpoint of the building manager—as well as materials that have never been scientifically considered or tested at all. The building manager is brought in touch with and is interested in, qualities of permanence, economy, usefulness in operation, and the like, which more or less escape other professions. It would seem proper that all materials entering into the construction, equipment and operation of a building, should be considered and as far as desirable actually tested, under the supervision of building managers, and for the qualities which interest building managers.

(4) While the Committee may, therefore, plan and organize eventually to cover a large field, it would nevertheless seem desirable to select some small and very definite part of that field upon which to begin its actual work. The Committee might start with some given class of materials, and confine itself to that class until both of two results have been accomplished:

- (a) The given class of materials is so completely, or at least so adequately, covered that a report of some consequence can be made.
- (b) The system of considering and testing is so adequately worked out that it may be applied to other classes of materials.

It will be of obvious advantage for the work and reports of the Committee to proceed with certainty and with thoroughness, rather than haphazard; in such a way only can the necessary respect for reports of the Committee be developed.

(7) In selecting a laboratory for testing the selected class of materials, the Committee will, of course, recognize that the Association cannot at present build or purchase, or even rent and equip, a laboratory that would be in any degree adequate. It would seem necessary to use laboratory facilities already existing. As the members of the Committee know, there are many such, which may be classified as follows:

GOVERNMENTAL:

Such as the Bureau of Standards, Washington, D. C.

EDUCATIONAL:

Such as at all the leading Universities and Technical Schools.

TRADES

Such as the Underwriters' Laboratories.

COMMERCIAL:

Such as exist in every large city, operated as a business for gain. Institute of Industrial Research, for example, Washington, D. C.

A survey of the facilities, costs and other conditions of such laboratories would seem to be one of the desirable preliminaries.

(9) The buildings of the Association may to a considerable extent be utilized for laboratory purposes, and so utilized constitute a very great and very important laboratory. The Committee may well find that the most satisfactory test of some materials lies in extensive use under varying conditions rather than in any single laboratory experiment. The Committee will in such cases consider how such extensive use of the buildings of the Association may be so supervised as to give scientifically accurate results.

(10) In selecting the manufacturer whose product is to be tested, contract will habitually be made that the manufacturer pays the cost of the test or tests, no matter what the outcome or what the report of the Committee may be.

(11) By the system of requiring manufacturers to pay the cost of actual testing the principal financial burden of the work of the Committee will thus be taken care of. But other costs will undoubtedly be incurred, in order to do effective work and obtain results of value. The Chairman of the Committee will apply (through the Executive Office) to the Executive Committee for authority to incur expense, accompanying his application with information as definite and itemized as possible.

(12) In selecting the sample or samples to be tested, precautions will be necessary. The Underwriters' Laboratories can send to the manufacturer for the sample and later, by their force of inspectors, can insure the output of the factory being up to the samples submitted. The Association cannot do this. It can, however, select samples of the manufacturers' product already on the market, preferably in two or more cities in different parts of the country; so that the tests will apply to the output of the factory in the past; and by repetition, can be made to apply to the output from time to time in the future.

This Committee has now organized its plan of work, has selected certain definite articles for investigation and is prepared to proceed.

The work will be conducted through the Executive Office of the Association. It will be generally guided by the Chairman of the Committee, subject to reference to, and approval by, the membership of the Committee both as to methods, action and findings. It will be particularly supervised, at the Executive Office, by a highly qualified engineer, B. K. Read, B. S. M. E.

The work of the Chairman and of the membership of the Committee is volunteer and unremunerated. The salaries of the Executive Secretary and of the Engineer of the Committee, and all other overhead expenses, are borne by the National Associa-

tion. So also will be the publication and distribution of the successive reports.

It is expected, however, that certain other expenses, particularly relating to the articles to be investigated and reported upon, will be borne by the respective manufacturers of those articles. These manufacturers' expenses will include at least the following:

- (a) Actual retail cost of purchase of one sample article.
This sample will be returned to the manufacturer later if desired.
- (b) Actual cost (if any) of dismounting and re-assembling the sample article.
- (c) Actual cost of laboratory tests applied to sample article—the results to be published in the report.
- (d) Actual cost of a standard, uniform drawing (or drawings) to be published in the report.
- (e) Actual cost of a standard, uniform specification to be published in the report.

As the work of the Association and of the Committee proceeds, the time will no doubt arrive when *all* of the costs of research, including a pro-rata of overhead and of publication of the reports, will be gladly borne by the manufacturers. But at the outset, the above is thought to be a fair distribution.

At the outset, moreover, some manufacturers will very likely not see the necessity of having their article appear in such a report. But when the character and reliability of these reports have been established, when each report is an encyclopedia of *all* the facts about *all* the articles of each sort, when such reports are filed and made the basis of all further orders not only by the membership of the National Association but also by many outside owners, managers, architects, engineers and contractors—manufacturers will not have to be solicited to receive a national guarantee and the most valuable national publicity, at actual and nominal cost.

EXHIBIT C.

EXTRACT FROM CIRCULAR LETTER CHAIRMAN TO MEMBERS OF COMMITTEE ON RESEARCH

MARCH 25, 1922.

As far back as the Convention of 1920, at Minneapolis, ex-President Swetland pointed out that one of the principal fields of work of the National Association lay in research and reports upon the materials of construction, the equipment, and the other physical elements of our buildings.

Upon reflection, I found that there were perfectly solid reasons for this fact:

- (a) Physical objects, like marble and radiator valves and soap-powders, are the same regardless of location. If a given radiator valve be shipped from Atlanta to Seattle; or if one be made in Atlanta and one in Seattle, according to the same specifications; the radiator valve will be exactly the same. Accordingly, data collected upon any given radiator valve in Boston would "match up" with similar data collected in Los Angeles. And a nation-wide research would obviously develop *more* data and be more conclusive than one however well conducted in a single city (by an individual or by a local association).
- (b) The cost of any adequate research must necessarily be considerable. It can be accomplished only by the expenditure of a lot of time, much of which must be the time of a technically expert man or men. This expenditure would probably prove a fatal obstacle to any extensive course of research either by an individual or by a local association. This expenditure can best be borne by the National Association, drawing its financial support from *all* of the local associations and from many individual members.
- (c) The report that is finally rendered, based upon the nation-wide data so gathered, will be of nation-wide application. It will apply just as much to New York as to Portland. The laws of nature apply in both places—and so will a report upon any physical element operating under those laws. Rentals, taxes, wages and all the non-physical elements will vary in every city according to local circumstances—and must be left largely to local treatment. But marble and soap-powder are the same regardless of race, color, or previous condition of latitude or longitude.

There are a few minor exceptions to these principles. Some cities have longer steam-heating seasons than others—warranting a greater capital investment in steam-heating and steam-saving devices. In cities burning bituminous coal there is more sulphurous acid in the air, probably more atmospheric electrolysis and certainly more corrosion of exposed steel and iron. Differences in rainfall and snowfall may demand differences in roof construction. And some given building material may, by being cheaper in one city than another, find warrant for its use in the former, though actually not so good according to test.

But these differences are minor. They will not diminish the applicability of our reports, in a general way, more than perhaps one or two per cent. We will be 98 per cent or 99 per cent to the good—which ought to do.

EXHIBIT D.

MEMORANDUM ON REPORTS IN GENERAL

(1) CLARITY AND DEFINITENESS.

Our reports must be determined by our object, which is to advise our members as to the relative qualities of each class of articles which they buy. Our reports must be such that our members can readily understand and apply them. Accordingly, our reports must, first of all, be perfectly clear and perfectly definite. They must *not* be unduly technical, in any way doubtful, or vaguely general.

(2) FACT vs. OPINION.

Our reports must, in the second place, be expressions of fact as distinguished from opinion. That is, just as far as possible. Where any quality of an article *can* be expressed in facts, we must get the facts and state them—and in such case not make any statement of opinion. But where a quality can *not* be expressed in facts—as, for example, those qualities that are related to human uses, that must be measured in psychological terms—then we must form the best possible estimates along lines recognized for such purposes.

(3) FORM vs. EXPRESSION.

The expression of the facts should be, in the order of preference, as follows:

- (a) *Illustrations.* At least one cut, usually in section, showing actual construction in an exact and at the same time clearly comprehensible way, like a Patent Office drawing. Each such cut should be supplemented by a specification. The Patent Office, over a century of time, has evolved a very definite method of explaining and defining construction; we should take advantage of this experience.
- (b) *Graphs.* All qualities that can be reduced to quantitative form should be so reduced. The quantities so obtained should, as far as possible, be expressed in graphs, as being quicker and easier to understand, and as better showing quantities, particularly relative quantities, than figures.
- (c) *Figures.* Quantities not possible to express in graphs should be expressed in figures, rather than in language. Figures are definite, and mean the same thing to everyone—language does not mean just the same to any two people. Figures are more likely to represent facts—language tends to represent opinion.
- (d) *Text.* Text, or language, should be minimized and used principally in explanation of the illustrations, graphs and figures above.

(4) QUALITIES TO BE EXPRESSED.

There are two general methods possible. One method is to select for each article to be studied the most important qualities of that particular article. The other method is to determine certain fundamental qualities which will apply to every article, but to give these qualities different weights in the case of one article as compared with another. Without discussing the relative merits of the two methods, further than to suggest that uniformity is preferable wherever and insofar as possible, we propose to start our research under the last mentioned method—of uniform qualities but different weightings.

(5) COST.

The first quality selected, and one unquestionably to be considered in every case, is cost. In general, cost will be construed to be not the first cost of an original installation, but the annual cost of keeping a building equipped with the article in question—such annual cost comprising an amortization of the first cost and repairs.

(6) EFFICIENCY.

The second quality selected, and equally universal in its application, is efficiency. When some article is purchased it is to produce some desired result. Its efficiency in so doing is obviously one of the principal considerations in the purchase.

In general, while "cost" will express what you pay, "efficiency" will express to a large extent what you get.

Cost will always be measured in dollars and cents; efficiency will frequently be so measured—and for that reason is placed next to cost.

(7) OPERATION.

If efficiency were broadly enough construed it would express not merely "to a large extent" what you get; it would express *all* that you get. But it has seemed wise to limit our use of efficiency to the action of the article in all of itself, in a mechanical way; and to take separate account of other qualities which involve human factors.

One of the qualities involving human factors is that of the ease and convenience of operation. An elevator door may be inexpensive to install and to maintain, it may be very efficient in its function of keeping people from falling down the shaft; but it may, on the other hand, be heavy and tiresome for the operator—and this quality would seem to be worth separate consideration.

Operation, in most cases, will be the relation of the article to the employee (since they do most of the operating).

(8) APPEARANCE.

A second quality involving human factors is that of appearance. We spend a hundred thousand dollars in the exterior of a

building, without hesitation, purely for appearance. We put in marbe corridors when concrete would last just as long. We use mahogany trim instead of birch, at twice the cost, though the difference in appearance is minute. And all this is *either* an entire waste, or *else* appearance is an important quality in those articles which are to be in public view.

Appearance, in every case, will be the impression made by the article upon the tenant or upon his customers.

(9) WEIGHTS.

We have specified the four fundamental qualities which we believe should always have consideration. But while they should always have *consideration*, it does not follow that they should always have *equal weight*. Quite to the contrary, in no two articles will any given quality have just the same weight. And in some articles, one or more of the four qualities may be found to have no weight at all. In such case, we believe it is well to consider the quality, but to give it zero as a weight. Just to preserve some uniformity.

The following are some examples of possible articles and some purely suggestive weights by way of illustration of the general scheme:

	Steam Meter	Elevator Door	Interior Wall Paint	Exterior Metal Paint
Cost	10	35	85	100
Efficiency	70	25	00(1)	00(1)
Operation	20	30	00	00
Appearance	00	10	15	00
	100	100	100	100

The foregoing examples are arranged in the order in which the first quality, "Cost," is weighted. In a steam meter we start with a weight of 10 points out of 100. In an exterior metal paint, cost would appear to be the only quality to be weighed—100 points (1).

As the Committee takes up one article after another for study, it will presumably, as a first step, fix preliminary weights; later these weights may be corrected as more information comes in, and as the laboratory tests proceed.

(10) SUBSEQUENT MEMORANDA.

In the case of each article to be tested, a subsequent memorandum will be submitted, covering the determination of weights for such article, the calculation of points, the laboratory tests in detail, the collection of experience data, and all other matters involved.

NOTE.—(1) Efficiency, is not figured, since in cost will be included all the *repainting* necessary to give continuous and complete protection to the surface covered.

EXHIBIT E.

MEMORANDUM ON RATING OF RADIATOR TRAPS

(1) MEMORANDUM ON REPORTS IN GENERAL.

A previous memorandum of the above title has already been submitted. This present memorandum, and other subsequent memoranda, will be based upon and will occasionally refer to the previous memorandum. For convenience, such previous memorandum will be referred to as "Memo on Reports."

(2) RADIATOR TRAPS.

This important article has been selected as the first to be made the subject of investigation, rating and report, by this Committee. The part which the radiator trap performs in the steam heating system, and its importance, will be duly elaborated in the final report of this Committee upon this article. This memorandum will be confined to the application to radiator traps of the principles laid down in the Memo on Reports; that is, to the qualities to be investigated, their relative weights, the methods of investigation of those qualities through laboratory tests and collection of building experience, and so the final calculation of ratings.

(3) WEIGHTS.

In discussing the weights proposed to be given to the four fundamental qualities (See Memo on Reports, Par. 9), in the case of radiator traps, we first quote the proposed weights, then discuss the method of determination.

	Points
Cost	22.5
Efficiency	75.0
Operation	0
Appearance	2.5
	100.0

As a practical matter, to arrive at the foregoing or at any other weighting, it appears in this case most convenient to start at the bottom with

Appearance. We may properly say that any article which is permanently in every tenant's room, and clearly visible even if not conspicuous, should be given *some* weight for appearance. On the other hand, this particular article is rather small and inconspicuous. The weight should approach the minimum, yet without becoming negligible. A weighing of 2.5 points would seem to meet these requirements.

Operation. All radiator traps are intended to operate themselves—to be automatic. Our employee's operation of such traps will be limited to cleaning or other forms of repair. Such cleaning and other repair will be

covered in Cost. Accordingly, it would seem proper to give to Operation a weight of zero.

Efficiency. Cost. The further weighting now resolves itself into dividing the remaining 97.5 points between Efficiency and Cost. Now both Efficiency and Cost are matters of expense and as such are reducible to dollars and cents. So reduced, in the case of what may be assumed an average trap, they may be compared. Such comparison will indicate the proper division of the 97.5 points. This method is worked out in detail in Appendix A. The result is an indicated weighting of Efficiency 75, Cost 22.5.

Criticism of the above proposed weighting of the qualities of radiator traps is cordially invited. Even if the above weighting be allowed to stand, or if some modified weighting be adopted by this Committee, any member can, for his own purposes, further modify such weighting to suit his own ideas. And he can apply such modified weighting to the data collected by this Committee, and calculate his own ratings, with but little difficulty.

(4) COST (Weight 22.5 Points)

"Cost" we have undertaken to construe as "the annual cost of keeping a building equipped with the article in question—such annual cost comprising an amortization of the first cost and repairs." (See Memo on Reports, Par. 5.)

The following are some hypothetical figures by way of illustration of the calculation proposed:

Hypothetical Figures	Trap A	Trap B	Trap C
First cost—price of article.....	\$3.90	\$4.90	\$3.40
—cost of installation....	.10	.10	.10
	\$4.00	\$5.00	\$3.50
Amortization—life in years.....	15	20	10
rate	10%	8.25%	15%
—annual	\$.40	\$.41	\$.525
Repair ¹ —average annual.....	\$.022	\$.00	\$.04
Annual cost	\$.422	\$.41	\$.565
Rating ² (Annual cost reduced to points)	21.8	22.5	16.3

- (1) Assume; experience on one building: 2,700 traps installed 10 years ago.
300 repairs within last 2 years @ \$2.00 each.

Divided up in 10 years $\frac{300}{10} = 30$ per year.

$\frac{30}{2,700} = \frac{1}{90}$ of a trap repaired per year per installation.

$\frac{1}{90} \times \$2.00 = .022.$

- (2) This reduction is had by giving to the trap (B) of the *minimum* annual cost the maximum of points—22.5; and by giving to the other traps points in exact inverse proportion to the annual cost.

(5) EFFICIENCY (Weight 75 Points)

There will be two methods of approach to the question of Efficiency, not only in the case of radiator traps, but probably in the case of most other articles that may be investigated:

- (a) *Laboratory Tests.* Such tests will rank high in accuracy. But they will be deficient in the number of traps tested, in the varying conditions of actual operation, and in the effect of age and use.
- (b) *Building Experience.* Such experience, formulated through questionnaires, will rank high in the number of traps covered, in the varying conditions of actual operations, and in the effect of age and use. Unfortunately, such experience cannot have an equally high degree of accuracy.

It is impossible to determine with certainty and exactness the relative weight that should be given to Laboratory Tests and to Building Experience. Their strong and their weak elements cannot be definitely measured and compared. In the absence of anything better, we propose to give equal weight to the following:

(Hypothetical Figures)		Trap A	Trap B	Trap C
Laboratory Tests				
Trap clean	(1)	98%	99%	97%
Trap dirty	(1)	95	97	87
Building Experience.....	(1)	90	95	86
	(3)	283	291	270
Arithmetical average, used as rating for Efficiency.....		94.3	97.0	90.0
Rating (Annual cost reduced to points) ¹		70.7	72.7	67.5

(6) LABORATORY TESTS

The two most important functions of the radiator trap are, when steam is turned into the radiator:

- (a) To permit the water of condensation to pass out continuously as formed.
- (b) To prevent uncondensed steam from passing out.

These functions must be performed under the varying conditions which obtain in actual practice, automatically and continuously.

The laboratory tests will comprise:

- (c) The admission of steam under the following conditions:

Test	Supply Pressure	Return Vacuum	Duration
No. 1	6 in. merc.	10 in. merc.	3 hrs.
No. 2	6 in. merc.	0 in. merc.	3 hrs.
No. 3	1 in. merc.	5 in. merc.	3 hrs.

Note. (1) The reduction is obtained by multiplying by the full weight (85 points) by the arithmetical average of efficiency of each trap.

- (d) The measurement of the steam condensed in the radiator.
- (e) The measurement of the steam passing uncondensed through the trap.
- (f) Temperatures:
 - Steam
 - Entering the radiator
 - In the radiator
 - Water
 - Leaving the radiator.

(7) EFFICIENCY RATINGS

Each trap, upon each test, will give figures that may be expressed in the fraction following:

$$\frac{\text{(Par. 6-d)} \\ \text{Amount of steam condensed}}{\text{Amount of steam condensed plus amount of steam wasted} \\ \text{(Par. 6-d) \hspace{10em} (Par. 6-e)}}$$

These fractions may be reduced to percentages. These percentages may then be averaged as suggested in the latter part of Par. 5 above.

The average efficiency percentages may then be reduced to efficiency ratings by the method already explained in connection with Cost. (See Par. 4, Note 2.)

(8) OPERATION (Weight 0 Points)

(9) APPEARANCE (Weight 2.5 Points)

The method which it is proposed to follow is that recognized for cases involving human factors. As Professor Dewey (of Columbia) says: "Everything that exists, exists in some quantity." But where human factors are involved, the ordinary instruments of physical mensuration will not apply. We must devise a special scale, involving the human factors in question.

In this particular case a scale of five will probably be adequate, in view of the very small weight involved.

Taking the traps under investigation, by comparison one is selected which presents, to those conducting the investigation, the best appearance. It is numbered No. 1. That presenting the worst appearance is numbered No. 5. Another is selected as midway between the best and worst, and is numbered No. 3. In a similar way No. 2 and No. 4 are selected.

The traps not forming part of the scale are easily estimated in appearance by comparison with the different numbers included in the scale.

All the traps being now numbered, to give them their respective ratings on a basis of 2.5 points, No. 1 will obviously receive the maximum rating of 2.5 points, the rest will be proportionately less. (See Par. 4, Note 2.)

(10) CRITICISM

In the case of the proposed weighting of the different qualities of radiator traps, we have invited criticism. (See Par. 3.) We now extend this invitation to include not only the weighting of the qualities, but also the details of estimating cost and efficiency, and the expression of the quantities estimated.

We further extend this invitation to include not only members of this Committee, but also other members of this Association, and manufacturers of radiator traps, engineers and architects into whose hands this memorandum may come.

Our *results* can be no better than our *method*. We wish to perfect our method to the maximum of comprehensiveness and accuracy reasonably possible.

EXHIBIT F

April 27, 1922.

Gentlemen:—

This Committee of this Association indicated upon the above letterhead, has selected the subject of radiator traps for research and report. I am writing to ask if you desire your own product to be included.

To advise you briefly of the character of this Association, I am enclosing a general outline thereof marked Exhibit A.

To advise you more particularly of the field of work of this Committee, I am enclosing another general outline marked Exhibit B.

These two enclosures will, I think, give you all the information necessary in a preliminary way. If you later desire more complete data, or more information upon any particular point, I shall be glad to see that it is furnished you.

If your attitude is favorable toward including your own radiator trap in this research and report, and if you would be disposed to pay the very moderate share of the cost proposed, I should be glad to have from you, at your earliest convenience, the following:

- (a) Your recommendations, as complete as possible as to the following:
 - 1. On just what basis we should rate such traps in general.
 - 2. Just what tests we should employ to establish such ratings.
- (b) Data about your trap in particular, including:
 - 1. A working shop drawing (blue print).
 - 2. A detailed specification of construction and operation.
 - 3. Any printed matter you may have, both text and illustrations, for distribution (about your trap).
 - 4. A record of any tests to which your trap has ever

been submitted, with full data as to organization of individual performing the test, data, place and results.

We propose to have these comparative tests of radiator traps made by the regular staff of a recognized laboratory.

When we have received from manufacturers a sufficient number of replies, with the data above requested, to enable us to formulate a scheme of testing, etc., we can ascertain and advise you just what the complete charges will be. At this time we can only say that, as to the retail price of one sample, you know that better than we. As to a uniform, standardized drawing or drawings, we presume the cost will be between five and ten dollars; and as to a corresponding specification, perhaps half as much.

Trusting you will approve this undertaking and will see your way to co-operate; and in any event asking the favor of an acknowledgment; I am

Very truly yours,
(Signed) GORDON STRONG,
Chairman, Committee on Research.

APPENDIX A RELATIVE WEIGHTS OF COST AND EFFICIENCY POUND OF STEAM

This expression is used in its customary sense of the amount of steam produced by the evaporation of a pound of water.

B. T. U. PER POUND

Total heat per pound of steam (at 212°)	1146.6	B. T. U.
Less heat of the liquid (at 212°)	180.0	"
Heat of vaporization	965.6	"

POUNDS RADIATION PER SQUARE FOOT

B. T. U. radiation per square foot of radiating surface per hour	270.0	B. T. U.
Pounds radiation per square foot per hour (270 divided by 965.6)	.27	Lbs.

POUNDS RADIATION PER RADIATOR

Assumed radiating surface of average radiator (controlled by one trap)	50.00	Sq. ft.
Assumed 6 months at 18 hours, 6x30x18	3240.00	Hrs.
Pounds of radiation = .27 (lbs.) × 50 (sq. ft.) × 3240 (hrs.) =	43,740	Lbs.

VALUE STEAM PER RADIATOR

Assumed approximate average value of steam (Per M lbs.)	\$ 1.00
Value per radiator 43,740 (M lbs.) × \$1.00	\$43.74

LOSS PER RADIATOR TRAP

Possible Percentages	Cost Steam Per Radiator	Possible Loss Per Radiator
1%	\$43.74	\$0.44
2%	"	.88
3%	"	1.32
4%	"	1.76
5%	"	2.20

PROPORTIONS

Assumed approximate average annual cost of providing and maintaining one radiator trap. (See Par. 4) \$0.42

Assumed approximate average percentage of loss 3%. (See above.) 1.32

$$\text{Proportion } \frac{\$.42}{\$1.32} = \frac{1}{3.1}$$

WEIGHTING

$$\frac{\text{Cost} = 22.5 \text{ Points}}{\text{Efficiency} = 75.0 \text{ Points}} \text{ is } \frac{1}{3.3}$$

Accordingly, the average and approximate figures now at hand as to radiator traps in general, would indicate the relative weighting of Cost and Efficiency as already stated. (See Par. 3.)

MR. SMITH: I move the adoption of the Colonel's report.

THE CHAIRMAN: I am sure no remarks of mine could improve this report. I hope the Association next year can continue with this good work.

It is unfortunate the Chairman of our Renting Committee was unable to be at this convention. Mr. Douglas has done as much constructive work for our service committees as any man we have ever had on that committee. He has worked constantly during the year, and I am sure the result of his endeavor has been beneficial. He has sent the report today with Mr. Steers, who will now present it. (Applause.)

ANDREW STEERS, Seattle: In presenting this report I bring Mr. Douglas' regrets over his inability to attend. Until the very last minute he expected to be here, but matters of great importance to him and the Metropolitan Building Company made it necessary for him to stay in Seattle. (Reads).

Report of the Committee on Renting

J. F. Douglas, Seattle

During our term of office, this committee has aimed to make building management a little better than it had been before. We aimed to set up a few new ideals before the building managers of the country. So that these ideals would not be left without a good foundation, we have endeavored to get accurate information on the conditions of the business and to distribute this to as many managers as possible. It is all very well to have ideals, but there must be a practical side to building management and we have tried to set up before the managers of the country a standard in the way of earnings that would at least be something to aim at.



ACCOMPLISHMENTS OF THE COMMITTEE

For several months, 'about the first day of the month, we have compiled a digest of the rental conditions throughout the country that reflected with reasonable accuracy the state of the rental business so far as it pertained to business properties. The members of the National Committee on Renting are the chairmen of the renting committees in their respective local associations. Through this digest, these chairmen have had not only accurate data as to the condition of the business throughout the country, but they have had quite a lot of additional information as to the trend of rentals and other matters of interest.

Shortly after the first of May, we prepared a digest of answers that were made to a questionnaire sent out to the chairmen of the various local renting committees. This questionnaire was designed, more than anything else, to get the managers to thinking on rental subjects. A great deal of interesting information was assembled in answer to the questionnaire and all this material was classified in the digest mentioned and forwarded to the members of the rental committee and through them to the members of the local associations.

At the request of the editor of the National Bulletin, the chairman of the committee has prepared each month a brief article on some rental subject. With these articles we tried to drive home some simple facts that would lay an educational groundwork for rental committees to be appointed in the future. In other words, we endeavored in these articles to set out very

clearly the A. B C's of the business. We expect that rental committees, hereafter formed, will elaborate on the high points of building management.

We have prepared quite a number of articles for different publications that represent the business property business in its true light. These articles have been published and have found quite a large circulation.

In the early part of the year we found that some publications and a number of financial writers frequently made off hand statements with reference to the rental business—many of which were to the effect that rents must immediately come down. Some of these statements were made by men who claim to speak for national organizations of great importance. Whenever these statements appeared we took the matter up by correspondence with their authors and gave them a history of the rental business down to date. In every case we have been able to show quite clearly that there was no foundation for their statements about the rental business.

We have undertaken to get together an exhibit that would be of interest and benefit to the managers of the country, particularly to rental men. We know that this exhibit is an experiment and that it might not turn out to be a successful feature of our work. If the members attending the Convention believe that the effort spent in gathering together this first exhibit has proved worth while, this feature will be continued.

SUGGESTIONS FOR THE FUTURE

I believe thoroughly in rotation in office. In order that the new president of the Association may not be in the least embarrassed, I wish first to recommend that a new chairman be selected for the Renting Committee. I think a certain amount of rotation would be good also in the membership of the committee. Where the local associations have a new and strong man, willing to take up the work, I believe it would be best to change the chairmen of the local committees and thus automatically change the membership of the national committee. I assume that the same method of selecting a committee will be followed as was followed this year.

I believe that there is quite a little value attached to the rental digest that our committee has prepared. I have felt from the first that we were getting the digest out a little too often by issuing it monthly. So little information, however, had been assembled by the members of the Renting Committee in the past, that I thought no great harm could come if we rather overdid the assembling of rental data this year. The renting business was in a state of uncertainty and it put a manager in a good strong position to have before him the latest information on his business. My recommendation is that for the future this digest be continued, but that it be put out about every two months.

Just as soon as the association can see its way, we believe that we ought to have a Research Committee or a research man devoting himself entirely to gathering rental data. For example, nearly all the building owners in the country have heard more or less about percentage rentals, but they have very little information on the subject. If we had a man who could devote himself to rental subjects, a great deal of most interesting and useful material could be gathered on this subject.

For a good many years, the building owner has been thinking about illuminated signs and projecting signs of all kinds. There is a great deal of material that could be assembled on this question. Particularly, digests of recent legislation in some of our cities could be made that would be of great value to building owners. Many building owners have not had the courage to buck the sign nuisance. They would be in a much stronger position if they knew, for instance, that on the best retail streets in New York, the illuminated and projecting signs must come down in the near future.

There is a limit to the amount of advertising and the amount of cost that can be profitably put into selling space, and material could be gathered on this subject.

Information about new methods of selling space could be distributed to the owners.

If the National Association could afford to hire a high-grade rental man to dig up information on all sorts of rental subjects, it would be of enormous value to the members of the association.

THEORETICAL SUBJECTS

From time to time, there will be produced in different cities in this country a great surplus of space. This is a result that we would like to avoid but that we will not always be successful in avoiding. There are two things that we ought at least to begin to think about. One is to devise ways and means for increasing the consumption of offices in all the cities in the country; the other is to look up ways and means of marketing a big surplus of space in any one city. These two things are pretty closely akin, but they probably need different methods of handling.

For instance, a campaign to educate the people might be put on in the national magazines of the country to stimulate the use of office space in all the cities of the country. There might be only one city in the country that had a very large surplus and this city might have to resort to entirely different methods to work off the surplus as quickly as possible. While it is not always possible to prevent the over-production of space in any one city, a great deal of good can be accomplished by the managers co-operation to put accurate data before the prospective builder. In other words, we will assume that a city will absorb one good-sized office building in a year. It might in many cases be possible

for the managers in a city to arrange to have a building program held up for one year without jeopardizing the interests of the renting public, and to the advantage of everyone. If a large building is built one year earlier than it can be used, it simply means that capital is invested in the building business that will not bring returns.

SELLING SPACE ON THE SQUARE FOOT BASIS

There has been some discussion going on in some of the different associations on the question of selling space on the square foot basis.

It would appear to the Renting Committee that there must be some basis of comparison or unit of value in the rental business, just as there is in every other business. On the square foot basis, we can compare all the various items of cost in our different buildings. Knowing the average square foot return, we can compare rentals in different buildings. It would appear to the Renting Committee that this is about as far as we need to go on the square foot basis.

If we find that it is necessary to charge an average of \$3.00 per square foot in order to make a certain building pay a fair return on the investment, it isn't necessary to rent all usable space for \$3.00 per square foot. Particularly desirable and well-located and well-lighted rooms should be rented for more than \$3.00 per square foot; and undesirable and poorly-lighted and poorly-located rooms should be rented at lower figures.

In other words, space isn't exactly like Carnation milk or certain other standardized products. Every can of Carnation milk is like every other can. They are all good and none are bad or partly bad. Space is very variable in its merits and should be rented according to the condition.

As a rule, therefore, we believe that it would be good practice to quote space by the room or on the suite basis. We realize that this is rather an indefinite rule, but on account of the great difference in the character of spaces available for rent, including such items as location in the building and such features as light, there is no fair comparison on a square foot basis between any two given spaces.

To put the matter in other words, we must retain the square foot rule for a comparison of costs and comparison of returns from the whole building, but the individual and vacant spaces should be sold on a room figure.

TAX PARTICIPATION CLAUSE

There is a well-defined tendency in the country to include in leases, particularly in long-term leases, what is known as a tax participation clause.

There are a great many arguments in favor of this procedure. It makes the tenant interested in the increase in taxes,

and it eliminates a speculative element from the lease for the owners. This tendency to include a tax participation clause is now so well defined that we think all owners in the country ought to conform to this practice.

Our Renting Committee recommends that where practical a tax participation clause be included. Particularly should this clause be a part of every ground floor lease and of every large area above the ground floor rented for mercantile purposes.

CHARGES FOR CERTAIN KINDS OF SERVICE

We should strive to have as much uniformity as possible in office building practice. When we find that there is a well-defined tendency toward any particular plan of operation, it would be well for the managers not conforming to this plan to give consideration to the matter of changing their practice.

It was the rule until a few years ago, for the building owners to furnish lamp globes, light, power, gas, and steam heat as part of the rent of the buildings. In a very large percentage of our cities, it is now the custom to charge the office tenant for globes, light, power and gas, and to charge the ground floor tenants for these services and for steam heat also. Gradually more owners are adopting this practice. This rule is in conformity with good, common sense, because where the tenant pays for light, power and gas he economizes in its use. Where it is charged to him as part of his rent, he has to pay for it in the end and isn't economical in using it.

In view of the fact that there is a well-defined tendency toward the practice of charging for these services as set out herein, the Renting Committee recommends that at as early a date as possible, the building owners of the country make it a rule to charge the ground floor tenant for all service used and to charge all office tenants for globes, light, power and gas.

PERCENTAGE RENTALS

More and more, owners are leasing mercantile spaces on a percentage basis. A great many owners are at sea as to the proper percentage to charge for any particular line of business. There is a wide variance between the amounts charged in the same line of business in the different cities and in some cases in the same city in equally good locations.

No hard and fast rule can be laid down, but, in order that the owners may have some figures before them, the Renting Committee suggests the following as a basis for percentage leases in certain lines of business:

Automobile Agencies	2%
Auto Accessories	10%
Barber Shops.....	\$20 to \$25 a chair
Cigars	10%
Credit Clothing	8%

Confectionery Stores	8% to 10%
Cloaks and Suits.....	6%
Drug Stores—General	8% to 10%
Drug Stores—Prescription	10%
Department Stores	2% to 3%
Dental and Medical Supplies.....	5%
Electrical Appliances	6% to 8%
Furniture—Household	7% to 8%
Furniture—Office	6%
Five and Ten Cent Stores.....	6% to 8%
Grocery Stores	5% to 6%
Haberdashers	7% to 8%
Hats—Men's	8% to 10%
Jewelers	6% to 7%
Millinery	10% to 12%
Rugs	7% to 8%
Restaurants	6% to 8%
Tailors—Men's	6% to 8%
Women's Wear	10%

We have frequently sent statements published by research bureaus of different retail organizations and research bureaus of some universities on the cost of doing business. These statements assume to show, among other things, the average rental charge against various lines of business. This data is largely based on figures furnished by merchants in small towns and villages, and is not applicable to a merchandising business in a large city. The National Association should have data that would indicate with reasonable accuracy the proper percentage to charge against the different kinds of merchandising businesses in a large city.

The relation between the owner and the percentage tenant is something like a partnership relation. On this account, the owner should take great care in selecting such a tenant.

A percentage lease should be hedged around with reasonable regulations. The lease should provide that the tenant must keep accurate books and records; that he must carry a reasonable amount of stock; and should not do less business than a minimum fixed in the lease.

SOME PROSPECTIVE DEVELOPMENTS

One of our committee men from San Francisco has developed the idea that there is a distinct relationship between the population of a city and the amount of office space that can be used in a city. According to the experience of San Francisco, a city can use about seven square feet of office space per capita. We are gathering the statistics for the city of Seattle to see whether this ratio holds out there.

During the next year some data should be gathered on this subject, because, if there is a reasonably well-defined relationship between population and office space, it would be of great value to establish this. We will then know about how much space could be absorbed in a given city and about how fast it would be advisable to produce office structures.

For a good many years, in many cities the department store has been giving the small shop owner the worst of it. The department store owner has had a tremendous advantage over the small store owner. He could employ a high-priced window trimmer, a high-priced advertising man, and in a great many other ways he had the advantage over the specialty shop. The specialty shop owner had one advantage over the department store in that he owned his business and was devoted to it and he often made headway against the hired department head even with the advantages offered by the department store. As building owners, we are more interested in the small shop than we are in the department stores, although we have a great many department store owners among our members.

If a number of building managers would co-operate in any given city they could employ a window trimmer or an advertising man or could adopt many other features of the department store. It will perhaps be quite a long time before we can arrive at this point, but when the time comes that we can get the small store owners to co-operate along the lines suggested, they will be very much better able to compete with the department stores. It is to the interest of the owner to begin thinking this problem out and to suggest some practical ways of working out a plan of co-operation.

SHAPE UP THE PROJECT

Many rental managers have given too little thought to the planning of their buildings. They have been content in a great many cases to accept the layout prepared by the architect with little practical experience. As rental managers, wherever it is possible, we should take a hand in planning the layout of new buildings so that we may have something to sell. We all know that it is comparatively easy to sell a well-planned and well-lighted office. Let us do everything within our power to get this kind of a product to sell. When we get a poor product or a non-salable building or portion of a building, let us not be satisfied with the space as it is handed to us, let us do everything possible to work out new layouts and improvements for the space, so that we will have something better to sell.

CONCLUSIONS

1. Our committee has assembled a considerable amount of rental information and distributed it at frequent intervals to the membership.

2. We have prepared a considerable amount of data that has found quite a distribution through magazines and periodicals.

3. We suggest that there be rotation in office and that new and strong men be appointed to membership on the Renting Committee.

4. We suggest when it is possible that the National Association put a man on its staff to devote his time and attention to gathering data on rental subjects and distributing it to the membership.

5. We suggest that a survey be made in the different cities in the country to ascertain whether there is any rule that can be established showing the relationship between the population and office space.

6. We suggest that office space be sold on the room or suite basis, the square foot measure being used to ascertain the average cost or average rental from a building.

7. We favor the inclusion of a tax participation clause in leases whenever possible.

8. We recommend charging all tenants for light globes, light, power and gas, and that ground floor tenants be charged for steam as well.

9. We have no recommendations to make with reference to the plan of renting space on percentage rentals. No definite rule can be laid down on this subject.

10. We suggest that a campaign be put on to show the advantages of maintaining city offices and to increase the consumption of offices in all cities.

11. We suggest that studies be made of the problem of marketing the surplus space in any one city.

12. We suggest that the managers begin thinking on plans for the co-operation among tenants so as to make it easier for the small shop owner to compete with the department store.

13. We suggest that we gather and disseminate information as to the best ways and means of improving the product we have to sell by improving layouts or in any other way.

Finally, the Renting Committee thanks the secretaries of all the local associations and all the members of the local associations and the National Association who have contributed to the work of the committee.

In a number of respects, our committee has done pioneer

work. We trust that we have helped to prepare the ground so that future Renting Committees will be able to reap some fruit from what we have sown.

Yours respectfully,

J. F. DOUGLAS,

Chairman, Seattle.

D. G. Scott, New York.

A. F. Liebman, Atlanta.

D. M. Rowe, Dayton.

Fred Buck, Duluth.

G. G. Jones, Portland.

C. E. Terrill, Cleveland.

H. L. Lynch, Cincinnati.

Jos. P. Burnett, Baltimore.

W. H. Ball, Philadelphia.

Arthur Hall, Chicago.

Ell Torrance, Minneapolis.

I. T. Cook, St. Louis.

R. W. McElroy, San Francisco.

C. J. Cooper, Denver.

C. A. Day, Detroit.

J. Edgar Brown, Los Angeles.

Geo. W. Klein, Indianapolis.

THE CHAIRMAN: I am sure the convention will desire Mr. Steers to convey to Mr. Douglas our appreciation for his splendid report and the work of his committee the yast year.

BASSETT JONES, New York: I have been to a good many conventions and have been tired of going and listening to people grinding their own axes. I am sorry I could not come before and cannot stay to the end of this convention.

I should like to see this Association do what the National Electric Light Association has done. They have an associate membership where such pikers as myself can join and associate with the Association. It seems to me the professional element should find a place in the Buildings Owners and Managers Association. I should like to suggest that steps be taken to establish an associate membership that men like myself can join if they want to—and I am sure they want to. (Applause.)

THE CHAIRMAN: I am sure this suggestion is well worthy the consideration of the Executive Committee.

Upon motion, the convention session was adjourned.

Thursday Evening Session

The Thursday evening session was called to order by President Coley at 8:30 p. m. President Coley introduced Mr. David Linquist of New York to deliver a paper on

Multi-Voltage Control and Micro-Levelling Elevators

ELEVATOR EQUIPMENT FOR INTENSIVE SERVICE

By David Linquist,

Chief Engineer, Otis Elevator Company, New York.

Owners and Managers are strongly interested in securing the most suitable elevator equipment for their buildings, well knowing that first-class elevator service is vital to success. Transportation, the circulating system, is the life of business, and vertical transportation is of equal importance to horizontal transportation. The modern building, as the home of intensive business, must be designed to utilize every possible means of saving time, so facilitating all routine operations as to reduce the consumption of physical and mental energy to a minimum. The elevator equipment, since it is the most important machinery in the building directly affecting business speed, is required to have maximum efficiency as a time saver.



Elevator passengers are notoriously more impatient than those of any other class of transportation and their demands are consequently more exacting. The very fact that in usual public transportation passengers are compelled to suffer discomfort and even a certain degree of danger without the possibility of redress, seems to make them all the more intolerant of the smallest defects in elevator service, for here they are able to "do something about it," and they generally do. Elevator service that will please patrons can hardly be overestimated as a factor in the popularity of a large modern building, so that every precaution must be taken to provide the most refined and suitable elevator installation. The failure of a great establishment involves such large losses, and the business benefits attendant upon excellence of elevator service are so great that the most improved apparatus is not only fully justified, but is a real economic necessity.

A complete and detailed study of the flow of traffic and the requirements of each individual case, with all the necessary data at hand to make exact calculations, is necessary, in order to accurately fit the elevator equipment to the building, and a surprisingly accurate fit is required if satisfactory results are to be obtained. In some office buildings, particularly those occupied by a single concern, it is desirable, where possible, to fill and empty the build-

ing in a period of approximately twenty minutes, since a large percentage of the passengers are employees who start and go to lunch at a definite time and who have the same leaving time. In other buildings, housing a number of small businesses, a much longer period may be allowed for filling and emptying, but there is a steady traffic of customers and agents all day long, to which the noon employees peak is added. Still other office buildings have several large companies and a number of smaller ones. In this condition the noon rush period is highly intensive, the sharp peak of employees adding to a considerable transient traffic. In some cases it is difficult to provide enough elevators for a given building to supply entirely satisfactory service.

In many cases the possibilities of the elevator equipment determine the commercial possibilities of a building; that is, with a definite plot, a definite location and a definite purpose, the elevator equipment fixes the economical height of the building. Stores, hotels, and various public and professional buildings have also their particular characteristics which must be fully considered in providing suitable elevators. In general, where the service is extensive, it is most advantageous commercially to have elevators of a type that will give the maximum service per elevator, that is, the number of elevators must be reduced to a minimum. Statistics are now available by means of which the elevator performance and power consumption in all service conditions may be definitely calculated. Accurate economic comparisons of different types of elevators may also be made.

Different types of elevator apparatus are manufactured to meet various requirements of service and cost. No elevator requirements are more exacting than those of intensive high speed passenger service, which should be of the best quality and maximum in quantity per elevator. When service is maximum, high elevator economy is assured, and when in addition, power consumption and maintenance are lowest, the installation is the most economical that is possible.

The conditions that make for the best elevator service cannot all be fully discussed here, including, as they do, the provision of channels of proper capacity for the flow of traffic, sufficient hall space, the best location and arrangement of elevators, the most effective shape and size of cars, the most suitable doors and door mechanism, the best signal system, and numerous other details in addition to the elevator machines and their controls. Elevator cars should be comparatively shallow in proportion to their width, should have as large openings as are practical, and should, in general, have as large a capacity as will allow operation with suitable intervals between cars.

The problems of actual transportation may be best appreciated by considering just what the ideal operation should be. The Signal System should be such as will direct the passengers to the

next car available so that they have an opportunity to locate at the car entrance and enter as quickly as possible after the car arrives. If we consider that instant when the door and gate are open at the bottom landing and the first passenger is about to enter, evidently the conditions insuring greatest facility in filling the car are that the car platform and door-sill shall be on the same level while the passengers enter, that the opening be as wide as possible and that the car be comparatively shallow. The passengers can then enter the car most rapidly and can readily dispose themselves to advantage. When a sufficient number of passengers has entered, the operator should be able to close the door and gate easily, surely and rapidly, and the operating mechanism should then be set to full speed position. The car should start as soon thereafter as possible and should automatically accelerate to full speed as rapidly as the passengers can comfortably stand. The elevator should run at full speed until it is just far enough away from the landing to be able to make the stop and, the car switch being thrown to "stop" position, the car should be smoothly and rapidly retarded, and should make the landing as quickly as possible, stopping flush—the gate and door being opened when the car is flush. The passengers now exit and enter with maximum facility, the platform being automatically adjusted to the landing as the load, and consequently the stretch of the hoisting cables varies. This describes the car switch operation giving maximum service. Further travel repeats the operation, except as to limit stops at the top and bottom landings. These should take place automatically over the shortest car travel that will give a smooth, accurate and positive stop with all loads.

Gearless Micro-Drive Elevators with Multi-Voltage Control come nearest to meeting these ideal requirements as outlined, since they insure maximum quantity and quality of service, combined with very low power consumption. They are the only satisfactory elevator equipment at present available for a large building requiring intensive high speed vertical transportation of passengers. Elevators of this type may be operated with equal success on either direct or alternating current supply, and no other apparatus is so economical on either current, for an installation requiring several elevators.

Multi-Voltage Micro-Drive gives maximum service because it takes advantage of every possible opportunity to save time, both while the cars are in motion and when they are at the landings. The excellent quality of its service is due to smooth and constant operation under all conditions of loading. Performance during the entire time the elevators are in motion is the same for all loads, and they always accelerate to full speed and retard to stop in the shortest permissible periods, and are best able to effectively utilize high running speeds.

One thousand feet per minute elevators are just as practical

as those of six hundred feet per minute. The smoothness and constancy of acceleration and retardation that are features of Multi-Voltage Control enable the highest rates of acceleration and retardation to be utilized without unpleasant sensations of passengers. The highest full running speeds are not the most important quantity service consideration of elevators of this type, the saving of time in starting and stopping, especially with heavy loads, and the reduction of the intervals at the landings, are of the greatest assistance in increasing the quantity of service per elevator. For smooth operation it is not enough to have rates of acceleration and retardation constant, as they are with this equipment during a considerable portion of the starting and stopping periods, but it is also necessary to design the elevator machine including motors, controls and brakes, so that the rate of change of acceleration is practically constant when it necessarily changes; that is, just at the start, in coming to full speed from the end of constant acceleration, in going from full speed to constant retardation, and finally in the actual stop. The same conditions exist when changing from fast to slow speeds and vice versa.

For maximum service it is evident that the time of traveling a given distance should be as short as possible, and since the governing factor is what the passenger can comfortably stand, acceleration and retardation should be equally smooth and rapid, no matter what the load or direction. This is characteristic of Multi-Voltage Control, but cannot be accomplished with Single Voltage Control, which varies considerably with load and direction, and is particularly slow when lifting heavy loads and when descending with very light loads, as is the case when filling the building in the morning rush period.

Single Voltage Resistance Control accelerates slowly when hoisting large loads and rapidly when lowering them, while retardation is rapid when hoisting load and slow when lowering load. If the controller were set so that the elevator came to speed when hoisting full load as rapidly as the passengers could stand, then the acceleration when full load was lowered would be so unpleasant that passengers would be seriously affected by the extreme sinking sensation at the start down. Such a setting is not practical and it is, therefore, necessary to resort to a compromise which slows down the acceleration when the elevator machine is loaded, thereby reducing service, and yet does not wholly eliminate the disagreeable feeling when descending. In the retardation period the single voltage control is at an even greater disadvantage compared with Multi-Voltage Control since it possesses no definite low speed. The retardation is abrupt and irregular, and the loaded car stops short in the up direction and slides more than is desirable in the down direction. Here the setting of the resistance control must also be a compromise which reduces service.

The considerable variation of the operation of the elevator provided with Single Voltage Control is soon to be a serious handicap in traveling a distance in the shortest possible time and due to the fact that this type of control is not so smooth as the Multi-Voltage, the practical result is that only with full load down does Single Voltage equal Multi-Voltage in acceleration—with all other loads it is considerably slower. In retardation, the Multi-Voltage is superior in every respect. This latter fact is particularly effective in increasing service, because the variations of Single Voltage operation make it practically impossible for the operator to gauge landings satisfactorily and considerable time is consequently lost, particularly in peak load periods, by slowing down too soon and by inching to correct the landing.

The Multi-Voltage Control, which is practically unaffected by loads and direction, enables the car to travel the distance at the highest average speed and to accelerate and retard constantly at all times. The operator can readily throw the car switch to stop position so that the car will come under the influence of the Micro-Drive within the Micro Zone, which extends a short distance on either side of the landing, and the Micro-Drive then stops the car platform level with the landing. Immediately upon throwing the car switch to stop position, the operator begins to open the gate and before any passengers can exit, the car is flush at the landing. Anyone fit to run an elevator can invariably make the landing described, with all loads in both directions, with Multi-Voltage Micro-Drive Elevators. The top and bottom landings are automatically made just as readily and with the shortest slow-down distance.

If we consider the stop with Single Voltage Control without the Micro-Drive, we shall readily see how the service is handicapped. It is extremely difficult for the operator to gauge the operation, especially with heavy loads, so that the car can be stopped even within two or three inches of the landing. The more or less indefinite slow speeds provided by the car switch must be utilized to bring the elevator to a very slow speed some distance from the landing in order to feel for the stop. Usually the car stops, especially in periods of intensive service, too far from the landing, and the operator must inch at least once, if not several times, to come somewhere near the level. The landing made is never flush and the step always handicaps exit and entrance, especially when the car is full. Considerable time is lost in inching at landings; first because the car must be slowed down too far ahead of the landings, and second because the operator cannot start to open the gate or door until the car has come to a stop, because he does not know if inching is required. Usually it is required if the building tenants are of a character that demand fair service and safety. There is then the additional delay between the operation of the car switch and the movement of the car and the operator again will usually have to wait until the car stops before starting to open

gate and door. All this wastes a lot of time which may easily run up to two or three seconds or more at a landing, and is also very unpleasant for the passengers, who are subjected to the unpleasant inching. Inching is also very hard on the motor and controller and wastes considerable power due to large resistance losses in this period. The arcs of the heavy starting currents which must be broken considerably increase the deterioration of controller contacts and subject the equipment to additional electrical and mechanical stresses. No matter how skillfully the car is handled, or how many times it is inched, the landing is not equal to the flush micro landing and there is always the stop, which varies in height as passengers enter and leave, due to variation in the stretch of cables.

The advantages of Gearless Micro-Drive Elevators with Multi-Voltage Control may now be briefly summarized. In the interests of owners and managers of buildings, they are:

1. Elevators of this type are safest. The car platform and the door sill are always flush when passengers enter and leave so that there is no "tripping hazard."

2. The number of elevators required for satisfactory service is reduced to a minimum because machines of this type give maximum service per elevator at all times, and do not slow up in peak periods of traffic when speed is most essential.

3. The number of operators is reduced to a minimum and the skilled operator is eliminated. Correct landings are invariably made and acceleration and retardation are entirely automatic.

4. Rental values are increased, due to superior quantity and quality of elevator service, and additional rentable space is provided by reduction in the number of elevators.

5. Reliability is increased and upkeep reduced by elimination of inching at the landings with attendant controller arcing and added operations. No series relays, apparatus dependent upon counter electro-motive force or mechanical retarding devices, such as dash pots, etc., are used.

6. Power consumption is reduced to a minimum by providing highly efficient acceleration and retardation, and avoiding false stops. These elevators require the smallest amount of special generating apparatus and have, therefore, the smallest constant losses of any elevators operated by voltage control.

7. Complete automatic operation of the highest speed elevators by push buttons in hall and car is made entirely practical by Multi-Voltage Micro-Drive.

8. The Micro-Drive provides a very dependable emergency operation and a very safe and satisfactory means of handling heavy weights, such as safes.

9. The permissible height of tower buildings is increased because of reduced hall and hatchway space required.

From the viewpoint of the Passenger, Multi-Voltage Micro-Drive Elevators have the following advantages:

1. Maximum safety, facility and comfort in entering and leaving the car.
2. Maximum speed of transportation, including time consumed at landings.
3. Maximum comfort and convenience of transportation. Car operates smoothly and uniformly with all loads. No objectionable sensations are experienced.

It may be well to call attention here to the fact that a large number of operating speed points under the control of the operator are decidedly objectionable and will, generally, decrease elevator service. Their only excuse can be that with some controls they are necessary, since the skill of the operator must be relied on to give even reasonably satisfactory operation. The best of operators never work a very high percentage of the time at full tension, and an excessive number of speeds tempts the operator to "sloppy" and "loafing" operation. The result is not only inefficient operation, but wrong operation and is decidedly unpleasant for the passenger, who is always in the hands of the operator. Sometimes an intermediate car switch speed is desired in order to hold the elevator in sequence, though it is usually unnecessary to operate in this manner since synchronizing can be most economically accomplished by holding the car at landings. Multi-Voltage Car Switch Control provides such a speed upon which the elevator operates at high efficiency. It is evidently desirable to eliminate, as far as possible, the operator as a factor in service. This is accomplished to a considerable extent by Multi-Voltage Micro-Drive Car Switch Control and to a much greater extent by Micro-Drive Full Automatic Control, which will be described later.

Various sorts of intensive service may be encountered. We have previously noted the conditions in the office building during the morning, noon and evening rush periods. Multi-Voltage Micro-Drive Elevators are particularly effective in these periods both when carrying loads up and down, because of avoiding excessive inching and feeling for the landings, reducing the time consumed by limit stops and avoiding the uncertain operation in making landings. In the noon rush, when in some periods heavy traffic flows both up and down with almost equal intensity and when stops are especially frequent, Multi-Voltage Micro-Drive Elevators are at an even greater advantage. If restaurants are located in the building other periods of intensive service are introduced, especially when large groups go to the restaurant at a definite time.

In department stores, Multi-Voltage Micro-Drive Elevators are also extremely effective, traveling short distances at maximum average speeds with all loads and always stopping accurately at

the floors. Here stops run from 350 to 450 per car mile and cars are usually loaded. The inter-floor traffic is also large. Maximum safety of entrance and exit is absolutely essential particularly because of the character of passengers carried. In this case Multi-Voltage Micro-Drive Elevators are at their best relative economy and save the most power over single voltage control.

Elevators of this type are particularly desirable for hotels because of the high quality and high speed service demand.

For hospitals the Micro-Drive should be considered a necessity because of the advantages of level landings and the elimination of false stops.

For freight service, the facility and safety of loading and unloading, and the rapid transportation, speed up production, cut costs and reduce maintenance of elevator apparatus and rolling stock.

Micro-Drive Elevators have now been in operation for several years in some of the most important office buildings, hotels, hospitals and factories and Multi-Voltage Micro-Drive Elevators have been giving an excellent account of themselves in office buildings and hotels for the past two years.

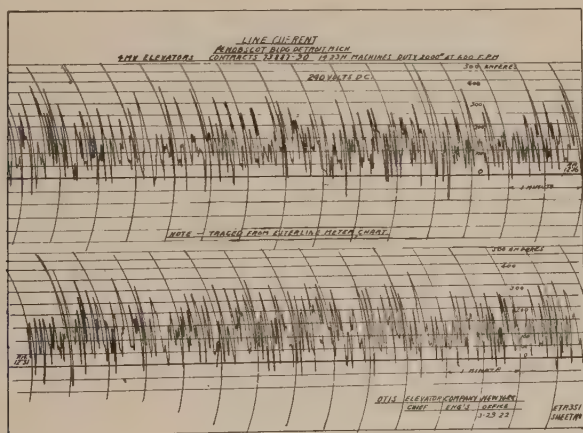


FIG. 1. TOTAL LINE CURRENT—FOUR MULTI-VOLTAGE MICRO-DRIVE LOCAL PASSENGER ELEVATORS.

This curve shows the variation with time of the total supply current for four (4) Multi-Voltage Micro-Drive, 2,000 lbs., 600 F. P. M. Elevators, that have replaced five (5) Plunger Elevators in the Penobscot Building, Detroit, Michigan. In a complete day's run taken early in December and representing maximum service, the highest peak, which was practically instantaneous and only occurred a few times during the entire day, was 490 amperes. If these had been Single Voltage Elevators, the corre-

sponding peaks would have been over 800 amperes or approximately four times full load starting current and would have been more frequent and of longer duration.

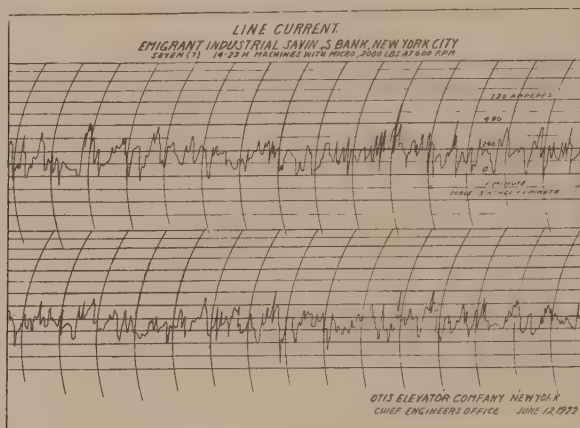


FIG. 2. TOTAL LINE CURRENT—SEVEN MULTI-VOLTAGE MICRO-DRIVE LOCAL PASSENGER ELEVATORS.

The second curve represents the line current of eight elevators of similar capacity and speed that have also replaced hydraulic elevators in the Emigrants' Industrial Savings Bank in New York City. The maximum peak current in this case is approximately 690 amperes, as against over 1,500 amperes that would be required for Single Voltage machines.

It is evident that the peak demand for a bank of Multi-Voltage Micro-Drive elevators is considerably lower than that of a bank of Single Voltage elevators of the same duties, and tests have now made it possible to definitely fix the demand for any number of elevators.

The Multi-Voltage Micro-Drive Elevators now in operation have been most successful in increasing service and improving operation and efficiency, fully demonstrating the great advantages of this elevator over the Single Voltage Straight Gearless type. Experience with these plants and tests of their operation have provided sufficient data for improvements which have been incorporated in the machine and controller shown, considerably improving their characteristics and efficiency, and making them more compact.

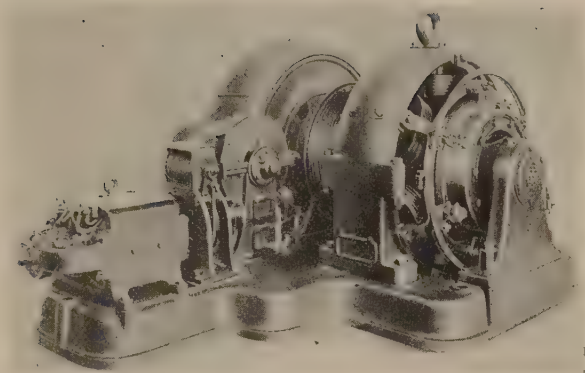


FIG. 3. GEARLESS TRACTION MICRO-DRIVE ELEVATOR MACHINE.

The new 1:1 Gearless Micro-Drive Elevator Machine shown has a capacity of 2,000 to 3,000 pounds at speeds of 600 to 1,000 F. P. M., with correspondingly high micro speeds, and is the latest development in highly refined elevator equipment.

The Micro-Drive Elevator Machine has a micrometer adjustment for adjusting the car to the landing. This Micro-Drive is operated by a leveling switch on the car which engages with fixed cams located in the hatchway.

The Electric Micro-Drive Elevator Machine is a unit provided with two drives for the hoisting sheave, the main drive and the micro drive. These drives are connected in a novel manner by a coupling which acts both as a brake for the main machine and as a friction clutch connecting the micro drive.

The Main Drive is rigidly connected to the traction sheave and the machine starts and runs the elevator by means of the main motor.

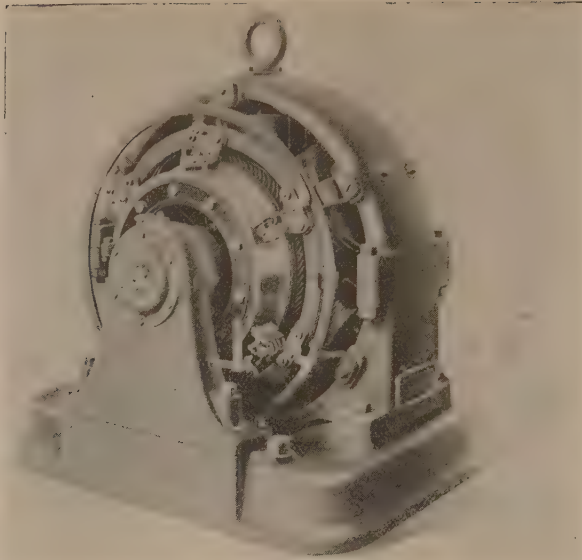


FIG 4. MOTOR FOR GEARLESS TRACTION ELEVATOR MACHINE.

In stopping, the machine is slowed down by the control, and after the speed has come down sufficiently, and the main brake has been applied, the Micro-Drive, which starts automatically, is connected to the traction sheave by the engagement of the main

brake shoes and then the Micro-Drive brings the car platform level with the door sill and stops the car under control of the hatchway cams acting on the leveling switch, which is mounted on the car structure.

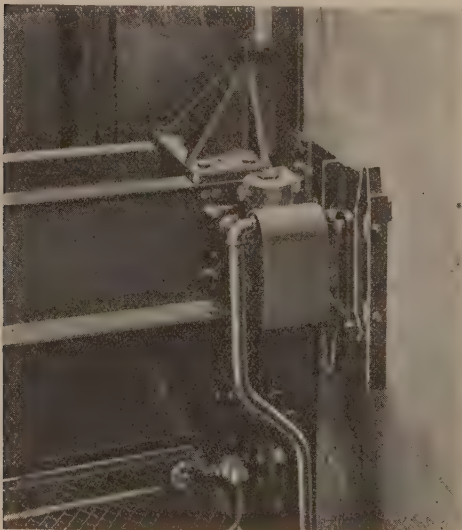


FIG. 5. LEVELING—SWITCH AND CAMS FOR MICRO-DRIVE ELEVATOR.

The definite slow speed of the Micro, which is practically

constant for all loads in both directions, in conjunction with the leveling switch which is definitely located relatively to the car platform, and the hatchway cams which in turn are definitely located relatively to the door sill, insures accurate landing.

With Car Switch control it is only necessary for the operator to bring the handle to stop position so that the car slows down to micro speed somewhere in the micro zone, which extends several inches on either side of the landing. The micro then automatically brings the car to the landing and stops the platform at the level, while the gate and door are opening. No time is lost since the Micro-Drive operates while the door and gate are opening and the platform is level by the time passengers or freight can enter or leave the car.

With Automatic control it is only necessary for the main controller to bring the car into the micro zone at a very slow speed and the Micro-Drive automatically brings the platform to the level. This type of elevator is particularly adapted to high speed automatic operation since the main drive is not required to stop the car accurately because the Micro-Drive corrects the level.

The Micro-Drive operates under separate control which goes into action automatically after the main controller has slowed down the machine and the main brake has been applied. As the car approaches the landing at which it is intended to stop, the main controller is set for stopping either by manual or automatic device and when the speed is sufficiently reduced, the micro controller operates and the micro clutch engages—the leveling switch, which is mounted on the car, being released automatically and engaging with the hatchway cams (one for the up and one for the down motion), and the car is brought to the level and stopped by the opening of the micro-drive controller and the application of the micro brake.

When there are intermediate landings between the top and bottom, the leveling switch is automatically held out of engagement with the hatchway cams by a magnetically operated device which is released by the opening of the main controller only when it is desired to stop at a landing.

To obtain the greatest accuracy, the leveling switch and cams should be located in a vertical plane through the edge of the platform it is desired to level, in order to eliminate the effect of any slight misalignment caused by deflection of the car structure, and lost motion between the car and guides.

The length of the micro zone, that is, the zone extending on either side of the landings, in which the Micro-Drive will operate, is fixed by the length of the hatchway cams and depends on the speed of the elevator, system of main control and the kind of service—the latter determining the degree of accuracy of level required. The average length of travel of the Micro-Drive will be

considerably less than half the length of the micro zone, both with automatic and manual control.

For Automatic Control the floor controller should be set so that the average load will stop approximately at the level under the operation of the floor controller and main drive, in order to insure the minimum average micro travel.

The Micro-Drive for high speed elevators has two definite speeds (constant with varying loads). In this case a longer micro zone is usually required and the greater part of the distance is covered at the high micro speed, reducing to low micro speed for accurate stopping. On slower speed machines, the two speed micro is also used where great accuracy of level is required.

The Micro-Drive Self-Leveling Elevator, which is alone capable of automatically making landings with any desired accuracy, irrespective of loads, direction and operating speeds, and of accurately maintaining the level during loading and unloading, has completely eliminated the landing problem. When automatically operated by Multi-Voltage Control, Micro-Drive Elevators come very close to providing perfect elevator service.

The Micro-Drive Elevator, either of the Worm Gear or Gearless type, is readily adapted to safe lifting and when so used has several advantages over other types of machines for the same purpose.

To use the Micro-Drive Elevator for carrying safes, it is only necessary to increase the tension of the main brake spring—(which is adjustable)—sufficiently to enable the micro to lift the load, the main brake acting as a friction clutch connecting the Micro-Drive to the traction sheave. As the car usually rests on locking bars while loading or unloading a safe, it is evident that should any attempt to lift the car be made before the proper spring tension has been applied, no injury could result, because the brake shoes would slide on the brake wheel and the car would not be lifted off the bars.

If, however, the ordinary machine is used for lifting safes without the brake pressure being sufficiently increased, the machine, which is positively connected to the traction sheave, would be able to lift the load, but the brake would be unable to stop it, so that the car would accelerate until stopped by the safety or the buffer.

Multi-Voltage Control for elevators is control based on several voltages of supply, the particular design that is under discussion being operated by four multiple direct current supply voltages. Since the standard supply for elevator service is 240 volts, the step voltages are then 60, 120 and 180. The elevator has four constant speeds corresponding to $1/6$, $1/3$, $1/2$ and full speed, on any of which the speed will be maintained fairly constant with all loads in both directions. Multi-Voltage Control guides the acceleration and retardation of the elevator at each of

these definite speeds, so that their rates are always practically constant. In accelerating, the supply voltages are applied in increasing order until the elevator motor armature is connected to full supply voltage, after which the field is somewhat weakened to obtain full speed. In retarding, the field is fully excited and the armature receives the supply voltages in decreasing order, the brakes (dynamic and friction) acting only after the power current is cut off and the elevator is down to about $1/6$ of full speed.

FIG. 6. MULTI-VOLTAGE MICRO-DRIVE ELEVATOR CONTROLLER.

The Multi-Voltage Control is comparatively simple, and consists principally of six practically duplicate magnet switches. One of these operates in connection with emergency stopping only, while the other five serve to direct the motion of the elevator and the operation of its electric brake, and to control acceleration and retardation by connecting the armature to the various speed voltages and varying the field excitation as required.

This Controller is provided with constant time acceleration. That is, the time in which magnet switches operate is definitely fixed by the dimensions of the magnet coils and magnets. There are no dash pots, no current limiting relays and no apparatus dependent upon counter E. M. F. During acceleration, the control operation is entirely independent of the load and practically independent of the line voltage. In slowing down, the retardation is also constant with all loads and is only dependent upon the time element of the switches in dropping out. When once properly set, this control maintains constant operation in service. In other words, it "stays put."

An interesting feature of this type of control is the comparatively slow change of current when steps of acceleration and retardation take place. This is due to the relatively high time constant of the armature circuit, which is a direct result of the reduction of armature circuit resistance by the practical elimination of starting resistance in the Multi-Voltage Control. The ratio of inductance to resistance is greatly increased over that of resistance control, and since it is the rate of change of acceleration that controls the sensation of the passenger, the relative "smoothing out of the bumps" makes a much more rapid acceleration possible without jerks with Multi-Voltage Control than is possible with the resistance type. It is evident that the rapid acceleration



and retardation which are smoothly obtained with Multi-Voltage Control, greatly increase the car mileage where stops are close together, as in all local service, and in a considerable portion of the travel in most express service.

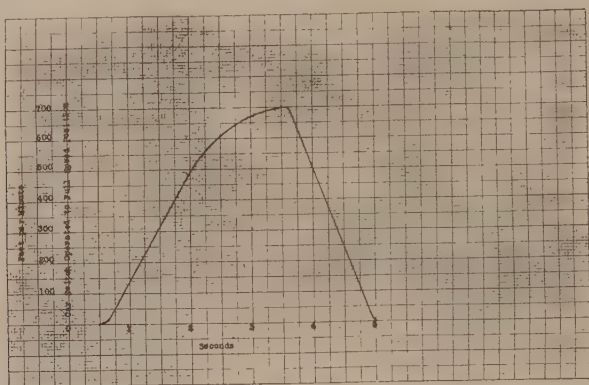


FIG. 7. SPEED TIME CURVE—700 F. P. M.—GEARLESS ELEVATOR WITH MULTI-VOLTAGE CONTROL.

This curve shows an average change of speed with time of a 2,500 lbs., 700 F. P. M. Multi-Voltage Micro-Drive Elevator. The rapid, smooth, and constant acceleration and retardation are clearly evident, as well as the smooth change of rate of acceleration.

The large inherent power losses in starting resistance of the resistance control are practically eliminated in the Multi-Voltage Control, the losses in the momentary resistance connected in transit of the magnet switches being very small because of their short duration. These momentary connections, however, not only serve their primary purpose of preventing the opening of the power circuit during the acceleration and retardation periods, but also serve as intermediate steps between the supply voltages, aiding smooth operation.

The economy of power in operating electric elevators on a Multi-Voltage System, due to the practical elimination of resistance losses, is evident, the combination of elevator and control in intensive service usually requiring less than half the power that would be required with resistance control. We have not yet, however, given consideration to the equipment necessary to supply the various voltages, nor have we considered the losses in this equipment.

Evidently it is desirable to operate the elevator directly on the supply lines as much as possible and the special generating apparatus necessary to supply the three additional voltages for acceleration and retardation should transfer as little energy as possible.

In most cases the necessary step voltages must be supplied by special generating apparatus, but where storage batteries are available, they may be used very effectively. In an actual installation of this character, it has been shown that the battery sections remain, at all times, uniformly charged, due to the fact that the entire momentum of the elevator is available for generation when slowing down, while only a portion of the accelerating power is taken from the batteries, the rest coming from the main supply line. Any source of direct current supply of the Multi-Voltage that has sufficient capacity can, of course, be utilized. When direct current is furnished and no storage batteries are available, the Multi-Voltages are obtained from a Double Armature Balancer-Generator which floats on the line, each armature having two windings and two commutators. This machine may also be used to supply a three-wire system for lighting.

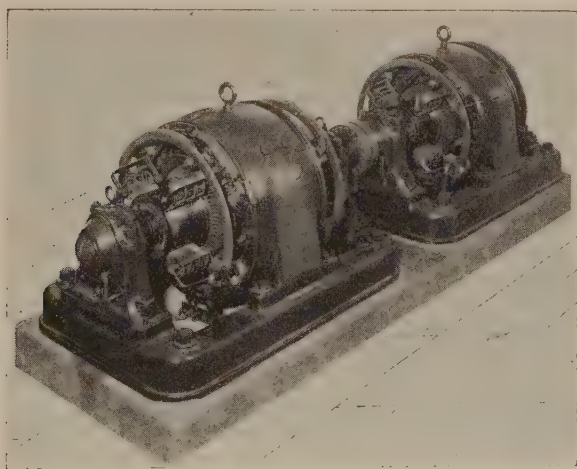


FIG. 8. BALANCER-GENERATOR FOR MULTI-VOLTAGE.

This unit is divided into two sections which act both as motor and generator, depending upon the requirements of the elevator motors.



FIG. 9. BALANCER GENERATOR SECTION.

Five supply lines deliver power to the individual elevator controllers, the two outside lines being the current supply and the three intermediate lines coming from the Balancer-Generator. The separate supply lines are protected by inverse time element relays which control a main switch. The Balancer-Generator is designed to run free with very small power consumption and to sparklessly commutate the rapidly varying peak loads of the acceleration and retardation periods. Individual elevators may be connected to start from either side of the supply line and in practice are divided between the two ends as equally as possible. This arrangement greatly relieves the Balancer-Generator, since if, for example, half the number of elevators are connected at a certain time to each 120 volt supply, they may take no current at all through the Balancer-Generator and will only draw unbalanced current in any case, taking the rest directly from the line. Generator equipment of this character has a very high efficiency and is the most economical source of Multi-Voltage supply for elevator service. Balancer-Generators are started by magnet control. Spare Balancer equipment is always provided so that in case one Balancer should accidentally fail, the spare is immediately available.

In order to insure that the smallest amount of special generating equipment that the load requires is run, additional Balancers may be automatically connected by means of thermostatic control. In case the equipment running reaches the maximum desirable heating, a thermostat switch located in the Balancer will operate, a second Balancer—(and a third if necessary)—will then be started by the magnet control and the Balancers will operate in parallel. An additional regulator may be arranged to operate on demand so that if for comparatively short periods the Balancer equipment is overloaded, another Balancer will be started

and connected in parallel. The additional Balancers will cut out only when the overload is removed and the Balancer has been reduced in temperature. This Automatic Balancer Control is also arranged so that the cool Balancer—that is, the one that has started last—is left connected.

Usually installations requiring the high class service for which Multi-Voltage Control is intended, consist of a number of elevators; and in these cases this system shows the greatest saving of power. In office buildings where stops are frequent and where direct current is supplied, Multi-Voltage has proved economical where four elevators are used—and for certain service where stops are made at every floor, even an installation of two elevators will consume less power than if operated by resistance control.

Where Alternating Current is supplied for several elevators, the Multi-Voltage system is the most economical that is possible. The Straight Alternating Current Elevator is a considerable consumer of power and Passenger Elevators have not yet been successfully operated at speeds above 400 F. P. M. Considering apparatus at present available, it is not only more economical to convert Alternating Current to Direct Current by means of a Motor-Generator Set and then to operate Gearless Traction Elevators, than to use Straight Alternating Current Elevator Machines, but the service of the Gearless machines is far superior both as to quality and quantity. It is practically impossible to design Induction Motors to run on 60 cycles at the very low rotative speeds required for Gearless Traction Machines, and Geared Machines are always subject to some trouble from the gears, no matter how well these are designed and made. There is also the considerable momentum of the high speed alternating current motor acting to prevent rapid acceleration and retardation. When a motor-generator set is required for four or more elevators, Multi-Voltage Control has always the advantage because better service is obtained for less money than can be had from any other type. Here a Balancer-Generator of suitable capacity is driven by a suitable Induction or Synchronous Motor. In this case, the motor-generator set required is considerably smaller than would be required for Single Voltage with resistance control. In some cases it has been found desirable to use rotary convertors with floating Balancer-Generators.

The success of Multi-Voltage Control in increasing the service per elevator and providing smooth and constant operation with all loads, up and down, has led to attempts to obtain similar results by other means. For this purpose the Ward-Leonard Control, which was applied to elevators more than twenty years ago, and partly abandoned some fifteen years ago, has been revived. This Control has inherent features that prevent it from giving maximum service and its economy is not favorably comparable

with that of the Multi-Voltage Control. It requires too much special generating equipment, because a generator is necessary for each elevator, and it is less definite and constant in operation than Multi-Voltage Control.

If we compare the special generating equipment required for an installation of eight elevators of 2,500 lbs. at 700 F. P. M. capacity, we find that the Ward-Leonard Control requires approximately 460 H. P. of driving motors with starters, and eight special generators of approximately 44 kilowatts capacity each. This represents a total capacity of motors and generators equal to 690 kilowatts, assuming that one motor drives two generators. In comparison with this, the Multi-Voltage equipment for operating these elevators is a Balancer-Generator of not more than 75 K. W. capacity with its starter. For full spare equipment, this must be duplicated. It is evident that the large amount of Ward-Leonard Generating apparatus takes a correspondingly large amount of power to run free, and has, therefore, large constant losses which add to the power consumption of the elevators. The variable losses are also considerably increased, due to the fact that with the Ward-Leonard system all power passes through the motor generator sets, whereas with Multi-Voltage Control, the Balancer has only to supply a portion of the power during the starting and stopping periods and no power at all when running at full speed.

The Ward-Leonard Control as usually applied to elevators, which is practically the same now as it was twenty years ago, has also the defect that it depends too much on the skill of the operator for satisfactory operation, and, therefore, varies considerably in operation. While smooth, the acceleration is not constant, due to the fact that in usual operation the car switch is rapidly thrown to the full speed position, with the result that when lowering heavy loads, the rate of acceleration is extremely rapid in the first portion of the accelerating period, and therefore, produces the "sinking" sensation so objectionable to the passengers. Later in the acceleration there is a noticeable check that at times is rather unpleasant. The same defects apply more or less to retardation.

The Ward-Leonard system was generally abandoned because, as applied to direct current supply, the advantages gained were more than offset by the disadvantages; in particular, the disadvantages of excessive motor-generator equipment with its correspondingly high power losses.

There are certain cases in which the Ward-Leonard system is justified. The increasing tendency of the Power Companies to supply alternating current only, has made a field for this equipment for a plant of one or two, or possibly three, elevators, which must be operated from alternating current supply. For two elevators, two motor-generator sets are required. These would be

compared with the Multi-Voltage Balancer-Generator set. Since it is desirable to have a complete spare, the Multi-Voltage Generator equipment would be so provided. The Ward-Leonard plants should also have reserve capacity in order to compare favorably in reliability with the Multi-Voltage equipment. In the case of two elevators, a spare Ward-Leonard Generator and the necessary change-over switch equipment, would therefore be required, and then the special Ward-Leonard generating equipment would exceed that required by Multi-Voltage. Where alternating current is supplied for one or two elevators in intensive service, the Ward-Leonard system, provided with a suitable control, will usually give adequate service.

Generally, where direct current is supplied, a first-class Single Voltage Control is best adapted to small plants of one or two elevators. Where alternating current is supplied and intensive high-speed service is not required, the Geared Alternating Current Elevator is most satisfactory.

In every case where four or more high-speed passenger elevators are required, the Multi-Voltage Control is superior to the Ward-Leonard Control, and, as the number of elevators in the installation increases, the advantages of Multi-Voltage over Ward-Leonard, or any other system, increases in rapid progression.

For equal quantity service in office buildings, six Multi-Voltage Micro-Drive Elevators are usually equivalent to eight Single Voltage Elevators. Conditions may exist where the service is so intensive over comparatively short periods that Multi-Voltage Micro-Drive elevators are necessary if the installation is to be anywhere near adequate. A large building occupied almost entirely by one company, for example, an insurance company, which has a large number of employees starting and stopping work at the same time, who may also go to lunch at about the same time, is likely to require all the Multi-Voltage Micro-Drive Elevators that can be economically installed to give satisfactory service in such periods. It would be impossible to install enough ordinary elevators to give even fair service. A similar condition exists when assemblies are held on the upper floors of buildings and the entire audience wants to get out in a few minutes.

Emergency operation with Multi-Voltage is provided for by automatically connecting resistance control to one elevator in each bank when the Balancer-Generators are shut down. This suffices for occasional lifts outside of regular business hours. Arrangement is also frequently made to start and stop balancers from the lower hall so as to provide for special service. The Micro-Drive is also used for emergency operation and is then operated, outside of the micro zone, by up and down push buttons in the car.

In making economic comparisons it is impossible to figure the money value of the safety features of the Micro-Drive and

there are apt to be different opinions as to the added rental value resulting from the superior quality of service of Multi-Voltage Micro-Drive Elevators. For equal service both Multi-Voltage and Micro-Drive can usually be justified by a considerable margin. To make fair comparisons a suitable money allowance should be made for the improved quality of service due to Multi-Voltage Micro-Drive and the added safety of the Micro-Drive.

Present indications point to the increasing use of the automatic elevator. Automatic elevators may be divided into three classes, consisting of those for office building service, those for department store service and those for apartment houses.

Multi-Voltage Micro-Drive Automatic Push Button Tower Elevators are now in course of installation in one of the finest buildings now under construction in New York and are expected to greatly increase the service per elevator as well as to provide a quality of service far in advance of anything previously attempted. The success of this installation is expected to create a considerable demand for elevators of this type.

The operating devices consist of push buttons located in the halls which are operated by the prospective passengers and push buttons in the car operated by an attendant. The prospective passenger momentarily presses the up or down button in the hall, as desired, and the next car that is not filled to capacity will automatically stop level with the floor, the gate and door opening automatically.

As passengers enter the car they call out the number of the floor they desire to the attendant, who, momentarily, presses the corresponding button. When all passengers have entered, the attendant presses the door-closing button in the car, and the door and gate automatically close, the car then automatically starting and proceeding to the next floor for which buttons have been pressed.

The signal system is arranged to indicate the number of the first car available to the prospective passenger in the hall in time for him to proceed directly to the corresponding opening, thus losing no time in entering the car and avoiding the annoyance of closely watching the usual indicating signals.

This automatic hall operation assures the prospective passenger of receiving the first car that can take him on and avoids the annoyance of operators failing to stop which the passenger usually attributes to disregard of signal.

Automatic operation as applied to department stores would automatically stop the elevator at each floor and automatically open gate and door. The closing of gate and door would be under the direction of the attendant as previously described.

For apartment houses a new type of Automatic Push Button Control will also be introduced.

The future trend of elevator development is sure to be toward full automatic operation, eliminating, as far as possible, the human element in operation. It is, of course, impossible to eliminate this element in the conduct of passengers, and, therefore, in many cases an attendant is required whose duty is to police the elevator and to control the closing of the doors and gates.

It is evident that for intensive service a control of the type of Multi-Voltage having the characteristics of smooth, rapid and constant operation under all conditions, is requisite. Even more necessary is a Self-Leveling Device such as is ideally represented by the Micro-Drive, particularly in connection with full automatic operation.

We may expect, in the near future, elevators that will automatically operate in the proper sequence and with suitable intervals, the control being arranged to relieve the lagging elevator by automatically reducing the stops required and increasing those of the leading elevator. There will also be a signal to the attendant that the elevator is lagging so that the entrance and exit of passengers may be hastened when necessary. (Applause).

Friday Morning Session

June 23, 1922.

The Friday morning session met with Vice-President Ell Torrance, Jr., of Minneapolis, in the chair.

CHAIRMAN TORRANCE: We are going to have a very human paper this morning—a paper on Mistakes. We all make them. Mr. Woolson is going to add a chapter to every building manager's library that will make it nothing short of a crime to make these mistakes hereafter. We are going to have it impressed indelibly on us. I take pleasure in introducing Mr. Ira H. Woolson, of New York. (Applause.)

Some of the Common Faults in Construction of Office and Apartment House Buildings as Regards Fire Hazard, and their Correction

Ira H. Woolson, Consulting Engineer, National Board of Fire Underwriters, New York City.

I never had the pleasure of meeting your Vice-President until a few minutes ago, and I was surprised to know how he knew so much about what I was going to say this morning. He seems to have known I was going to tell you about all the ills I find in the construction of a building, or ought to find. Unfortunately, it can't be done. You are very fortunate, too, that I can not do it, for it would be a long, tiresome proposition. I shall, however, attempt to point out to you some of the common defects which I have observed during a period of years in studying this problem that are common in most offices, apartments, hotels, and other buildings of that type.

The subject is a very broad one and there would be a tendency for me to wander and take up too much of your time. I am, therefore, going to impose upon you a written paper. If there are ideas that occur to you you would like to know about after the talk, I would be glad to aid you in any way I may. (Reads.)

Ordinarily office buildings of the type with which you gentlemen are connected are under private or corporate ownership and their destruction by fire is not commonly considered a matter of public concern any more than the loss of a dwelling house. The owner and tenants are supposed to collect their insurance and with it eventually replace building and contents, suffering, perhaps, more or less personal inconvenience and loss. The catastrophe is not looked upon in the same light as the burning of a court house or a school house in which the public has a distinct financial interest.



This view of the case, however, is wrong, for no modern office building can be suddenly destroyed without a very great public loss. This is particularly true of the high grade, imposing structures found in nearly all cities, and frequently monumental in character. Numerous tenants of such buildings have business directly connected with public welfare, such as lawyers, engineers,

trust companies, etc., who have in their possession manuscripts, drawings, and documents of great public value, many of them irreplaceable if lost. Frequently State, County and Municipal offices are located in such buildings, so that the loss of a modern office building is almost sure to be a public calamity, irrespective of the disaster to the owners.

No person can have an "honest fire," that is, a strictly accidental fire, and have his loss fully covered by an insurance policy. There are always losses of personal belongings which money cannot replace. There is the interruption of business and the mental stress which cannot be measured in dollars. This fact is true for all honest tenants, and, coupled with the public interest previously explained, makes it a self-evident proposition that every prudent owner of such buildings should take all reasonable precautions to prevent their destruction by fire.

There are hundreds of modern office buildings scattered all over the country, frequently advertised as "fireproof" in which, I regret to say, "reasonable precautions" have not been taken to properly protect them against the spread of fire. Many of you may be intimately acquainted with such buildings and have not realized their defects. It is my purpose to indicate to you some of the common points of weakness, in the hope that, realizing them, you, as responsible operators, will, so far as possible, correct the defects in existing buildings and avoid them in buildings under construction.

Accidental fires may be counted upon as an occasional certainty, but in a properly constructed, fire-resistive building, under reasonably efficient fire department protection, such fires should be confined to the tenant space in which they originate, certainly they should not be allowed to escape from the story where they start.

By the term "tenant space" I mean the one or several rooms occupied by one tenant which, when there are more than one, may be more or less openly connected as a matter of convenience and comfortable operation. Such fire control is seldom obtained, and yet many of you know of cases where fires have been restricted in just that way. I know of instances where I believe fires in single rooms in office buildings might have been allowed to burn themselves out without serious danger to the rest of the building. Such ideal conditions are not always practical to secure, but exercise of care in construction with a moderate increase in cost will remove a very large part of the usual fire distribution hazards which commonly exist in office buildings.

Now what are these defects, and how can they be remedied? I shall confine my remarks on this topic to the so-called "fireproof" office building; such buildings as the old Equitable Building in New York, the Union Trust Building in Cincinnati, and the C. B. & Q. Building in Chicago, all first-class buildings, differing some-

what in type, but all burned because of serious defects; and hundreds of others have failed from similar causes. Such losses are largely preventable, so it is certainly unintelligent not to forestall the possibility of disaster.

Fires which have their origin within buildings spread in three principal ways:

First—Horizontally through a story by way of hallways, and through glass panels in partitions, doors, and fanlights.

Second—Vertically through stairway and elevator shafts as well as by other minor floor openings.

Third—Vertically by way of outside windows.

I will discuss each separately, but first let me direct your attention to the fact that actual flame is not at all necessary for transporting fire. Hallways or stairways may have floors, walls and ceilings lined with marble, tile, or metal, with no burnable material in them and still be serious fire hazards because they act as flues for the transfer of hot air and gases from parts of the building where combustible material may be burning.

When air is heated to 1,000° F. or over—which is a temperature quickly reached in most fires—it will ignite instantly everything combustible with which it comes in contact. The actual flames of a fire may extend only a few feet from the point of origin, but the hot smoke and invisible heat waves may easily travel through an incombustible stairway or hallway for fifty or one hundred feet and then ignite the whole surface of a wooden door in an instant. At the same time, glass door panels and fan lights will collapse by rapid expansion, and the intense heat entering rooms will cause them to burst into flames.

An excellent example of this fact occurred a few years ago in the Hotel Lenox in Boston. The fire started in a bedroom on the third floor. The hot air passed through an open door and up through a stairway and elevator shaft of incombustible construction to the sixth story, and then traveled along the hallway until it found some doors left open by fleeing occupants. These rooms were burned out. At the same time, it jumped from the sixth to the eleventh story, and burned out a few rooms in the same manner. The intervening stories were very little injured, except that in some cases there was surface burning of a small amount of wood trim in the hallways. This action of heated air is common, but a fire is not often extinguished in time to preserve the evidence so well.

Frequently combustible gases are generated by a fire and escape hot and unburned because the oxygen of the air is all consumed. Such gases may travel a long distance and then suddenly ignite and burn due to contact with fresh air.

It is obvious that ordinary glass panels between rooms and hallways should be avoided and that all partitions separating tenants should be solid and of construction which would resist a fire

at least two hours, so that one suite of rooms might burn out without seriously endangering the adjoining suite. If glass must be used in hallway partitions, it should be wired glass in metal frames which would resist a fire for about an hour. However, it will not prevent radiation and is liable to fuse and sag from its fastenings. Ordinary glass in doors or partitions between rooms is not so objectionable and is frequently considered a necessity. It will fail quickly in case of fire, but if the suite is properly cut off, the chances of controlling the fire within it are good.

If a building is large with wings or other connected parts, the wall between the parts should be a fire wall with no openings whatever, except the hallway in each story, and this should be cut off by double fire doors. Such separation would probably save one part of the building, even if the other should burn. At the same time these doorways provide the very best known protection to life. It is called a "horizontal exit," that is, simply a horizontal passageway through the fire doors from one portion of a building to another. Such exits would exist in each story and a person once past the doors would be perfectly safe from a fire in the other portion of the building, at least for a long time, and could go down to the street leisurely by the required stairways.

The necessity for closing stairway and elevator shafts with fire resistive partitions and fire doors is pretty well understood, and is done in most modern office buildings. There are weak points, however, which are frequently overlooked. No fan lights, door panels, or windows of any kind should be permitted in interior partitions surrounding such shafts. The stairway protection should be such that once a person is within the shaft he is safe and can go down to the street without danger, even though passing through stories which are on fire. Furthermore, as soon as the occupants of a building are out, firemen can use such stairways to great advantage by being able to go up past the burning story and keep watch on stories above without danger of being trapped.

If glass, even wired glass, is permitted in the interior enclosures, there is always the chance that the door leading to a burning room may be left open, that some hallway partition may fail allowing the fire to enter the hallway, or combustible material temporarily stored in the hallway may ignite and burn. Under such conditions glass in the stairway partition would be dangerous due both to radiated heat and to possibility of failure, either of which might make the stairway untenable.

Outside windows, on the other hand, are recommended not only for light, but also for escape of smoke which may get into the stairway. A standpipe should always be located in each stair shaft equipped with 50 feet of 1½-inch cotton hose for emergency use by employes, also with standard hose connections for firemen's use.

Stairway doors should always open in the line of exit travel, those at the bottom opening outward, those above inward. Furthermore, the width of exit stair landings should be such that the inward swing of the door will not incroach upon the passageway.

Stairway doors should always be self-closing, that is, normally held shut by some mechanical device. The purpose of this is to keep heat and smoke out of the stairway in case of fire. An automatic fire door, that is, one released by action of heat, such as a fusible link, would not do, because in case of fire a stairway would probably be filled with smoke and made untenable long before the heat would be sufficient to operate an automatic device. It must always be remembered that shafts in a high building operate just like a chimney flue and have a draft in them which invites the passage of smoke and fire, hence the necessity for keeping the doors closed.

Right here I wish to call attention to the splendid advantages of smokeproof towers as life-saving devices, also as a fire-fighting facility. I mean the enclosed stairway which can only be entered through a doorway connecting to an outside balcony or through a vestibule opening to the outside air. Such stairways are being installed in many high-grade office buildings and are splendid equipment.

A brisk fire occurred on the 7th floor of the Bush Terminal Building in 42nd street, New York, one afternoon about two years ago. The occupants had been instructed that in case of a fire alarm being sounded, they were all to go out by the smokeproof tower and not attempt to use the elevators, the latter being reserved for the use of firemen. They followed instructions and all occupants in 19 stories passed down to the street in a few minutes, and the majority did not know where the fire was until they reached the street.

The problem of safe escape of a large number of people housed in various stories of a high office building is a serious one in case of fire. The panic hazard must always be considered, especially if smoke and hot air fill the hallways. Under such conditions the smokeproof tower is indeed "a tower of strength," and safety. It ranks next to the horizontal exit as a safety to life construction.

You may wonder how smoke and hot air from a fire can get into the hallways if the shafts are properly constructed. It could be prevented, and usually is prevented, in stairways, but the trouble is with the elevator shafts. The doors of such shafts must be manually operated, and it is practically necessary to make them sliding. This means that there is always an opening of $\frac{1}{2}$ to $\frac{3}{4}$ inch all round the doors, and a fire occurring in the lower stories of a building will feed smoke and hot gases into the elevator shaft through these openings. If they accumulate faster than they can escape by vents at the top, they will be forced out around the door openings into the various hallways above. This

is why elevators cannot be depended upon as a means of exit in case of fire. They are frequently useful in the early stages of a fire, but, as a rule, they are quickly put out of commission by smoke.

It is quite necessary to provide skylights or vents over elevator shafts so that firemen can open them and let the smoke and hot gases out, for such gases are liable to explode. A fire in the Building Trades Employers' Association Building in New York a few years ago filled the elevator shaft with hot gases and there was no top ventilation. An explosion occurred which blew the doors from their fastenings in two or three stories and spread the fire unnecessarily.

Always remember that one must be consistent in fire protection work. It is no more use to partially protect against fire than it is to lock part of the doors of a house to keep out sneak thieves. I know of an office building in one of our large cities which has the elevator shaft properly enclosed in all stories except the basement, where there is nothing but wire grill doors the full width of the shaft. This was done for the convenience of the janitorial staff in handling furniture. The doors are light, easily operated, and give a large opening. They serve the purpose explained admirably, but completely ruin the fire protection of the shaft so far as a basement fire is concerned, and that is the place where fires are very likely to start.

During the War I was called upon to inspect one of the largest and most important Government office buildings in Washington. I discovered an elevator shaft with basement and sub-basement doors built of 2-inch steel angle iron frame work, heavily braced, covered with $\frac{1}{8}$ -inch sheet steel riveted to the angle irons and installed with much mechanical skill and expense to effect complete closure of the shaft opening. Then there were four large open stairways connecting these two lower stories to all stories above with absolutely no enclosure of any of them and no cut-offs in the basement hallways. In these lower stories there were in operation five carpenter shops, two paint shops and literally carloads of lumber, furniture, wooden bookcases, and other highly combustible material stored in the halls and adjoining rooms with open doorways.

I cannot begin to tell you all the first hazards I found in this building, but when I tell you that I discovered in this building under no semblance of proper protection the two most precious documents in the possession of this country, and none more valuable to humanity in all the world's history (I refer to the Declaration of Independence and the Constitution of the United States), and with them hundreds of other records of priceless historic value, you can imagine my feelings. I was staggered by the magnitude of the disaster to this nation **which an uncontrolled fire in that building would produce.** Those conditions, to some extent, had existed for years, but had **grown much worse**

during the war time. Everybody was accustomed to the situation and apparently no one in authority recognized the danger, at least nothing had ever been done to remove it.

A strong report was rendered, but it was exceedingly difficult to get conditions changed. Executive officials were willing to continue the hazards, at least some of the worst of them, for the sake of convenience. I made up my mind I would never rest until those two great instruments of human liberty were made safe. Finally, through repeated efforts of interested Senators, many structural changes were made, greatly increasing the protection to the building, and last Fall the two great documents were removed to the Congressional Library Building, where they are reasonably safe. The day I learned that, a great anxiety was removed from my mind.

With all the care that can be exercised in fire resistive construction, its value is frequently nullified by some fool who does not realize what he does. I observed this condition in a handsome hotel in Washington only this week. The hotel is beautifully built with special fire protection features that are deserving of high commendation. Different portions are separated by fire walls with fire doors hidden in wall pockets and arranged to close automatically in case of fire. There is an elaborate automatic fire alarm system in all parts of the building; room doors and fan lights are solid and intended to resist spread of fire for some time. The elevator doors are metal clad and were made to close snugly at the middle where they meet, but I suppose they were noisy, or perhaps troublesome in some way, so some fool mechanic has put two rubber buffers between the closing edges of the doors in each story. The buffers maintain an open space of 1 to 2 inches between each pair of doors, and so serve to make the whole elevator shaft protection practically worthless. It is hard to understand such stupidity.

There are numerous ways in which fire is spread throughout a building other than by stairways and elevators, fan lights, and hallways, and of these I wish to speak, particularly because they are frequently overlooked.

It is surprising how small an opening through a wall or floor will suffice as a gateway for superheated air to start a fire on the opposite side.

In investigating a fire in a reinforced concrete building at Far Rockaway, L. I., I discovered that the fire entered the concrete building from an adjoining structure through a four-inch hole in the concrete party wall, and then passed to two stories above by way of two-inch holes in concrete floors where a heater pipe had been removed. At another place the hot air went through a one-inch hole in the party wall, and set fire to combustible material.

Many fires are transmitted through fire-resistive floors by

means a super-heated air flowing through the small spaces surrounding steam and hot-water pipes. The loose fitting metal collars ordinarily used to close such openings are not sufficient protection; the space between ceiling and floor collars should be packed with asbestos or some other flexible incombustible material.

Another class of unprotected connections in nearly all buildings which, though usually out of sight, are nevertheless dangerous, are the ventilating ducts, also warm air ducts if that system of heating be employed. These metal ducts cross the basement ceiling to risers which distribute throughout the building.

The basement is usually the storeroom for boxes, old furniture, surplus publications and other highly combustible material. If a fire becomes serious, the sheet metal ducts will get red hot, and although no flame enters them, the air within is superheated and distributed through the building, igniting every combustible thing it touches.

All ventilating and heating ducts in basement or cellar should be covered with at least 1 inch of cellular asbestos board or some equivalent. Sprinklers should also be installed in all rooms where combustible material is stored.

Restaurant range vent flues are particularly dangerous because they accumulate greasy soot which is liable to ignite and make a very hot fire. The portion of such flues between the range and chimney stack should be covered with at least 2 inches of incombustible covering.

Sometimes small hand-operated book or document hoists will be found, also dust or waste paper chutes with an occasional ceiling ventilator from the top-story rooms into the attic, which latter space is liable to be a repository for all sorts of inflammable material. Such connecting channels should be studiously avoided, for there is always a draft through them and their element of danger is nearly as great as that of larger shafts.

When a tenant occupies more than one story and a private stairway is required, it is extremely important that it be securely cut off at the upper entrance by a substantial self-closing fire door. With such tenants there is also liable to be demand for a message or document chute. Such chutes should be avoided wherever possible, and if allowed, special precautions for protection should be taken.

The best fire departments in the country are practically helpless in fighting a fire above the seventh story from the street. Above that height the firemen must depend upon interior stand-pipes and occasionally streams which may be available from the roofs or windows of nearby buildings. Under such conditions a fire in the upper stories is liable to get out of control and travel upwards by way of the windows, if they are of ordinary glass in wooden frames and sash.

To protect against this hazard at least all windows more than 75 feet above the street should be fire windows. This would effectually prevent this kind of fire transmission and give firemen a chance to control the fire in the story of origin.

Thus far we have considered only the hazards of fires occurring within the building, but we must not forget the serious danger of exposure from fires in adjoining or nearby buildings. The recent burning of the C., B. & Q. Building in Chicago is a typical example. The heat from a fire 80 feet away rolled up against that 15-story building and ignited the eight upper stories simultaneously. Radiated heat entered the windows and ignited whatever combustible material it found. The windows were mostly of the ordinary type and many of them doubtless failed quickly when struck by the heat. The undivided floor areas were large, and each story became a roaring furnace of flame. The firemen were helpless. The stairway and elevator protection was good, and no fire passed through them, in fact the firemen were able to pass up and down the stairway shaft throughout the whole time of the fire, but the standpipes were not accessible and the heat of the fire was too intense for the men to enter the stories.

The result of this fire has created a great deal of interest and anxiety. Owners of such buildings have suddenly awakened to the seriousness of a hazard long recognized by fire protection engineers, but generally ignored or underrated by the public.

The fire has proved conclusively that a building of that character without special window protection is dangerously menaced by nearby combustible structures. Had the windows in this building been wired glass in metal frames, there is a bare possibility that the firemen might have been able to save the building. Such windows would not have prevented the passage of radiating heat, but they would have retarded it somewhat and at least have given the firemen a fighting chance.

My own judgment is that such windows would not alone have been sufficient to have protected all stories. It is quite evident that under similar circumstances office and like buildings should have the windows protected not only by wired glass in metal frames, but also have additional protection of either an outside shutter or an outside sprinkler arranged to play upon the window and keep it cool.

This subject was given special discussion in the recent meeting of the National Fire Protection Association at Atlantic City and different views were expressed, but the general opinion was that something more than wired glass windows are necessary under severe exposure.

Shutters have their disadvantages in that they are liable to corrode, particularly if of the swinging type. That type also disfigures the building, and are difficult to install on wide windows, and it is impractical to make them automatic. Sprinklers to

properly protect all sides of a high building would require numerous very large standpipes and a big volume of water, for they might have to operate two or three hours continuously. With a multiplication of buildings, it can readily be seen that such equipment might easily bleed the water mains to such extent as to seriously interfere with hydrant streams.

My personal opinion is that the most practical protection would be secured by fire windows plus rolling steel shutters arranged to close manually, also automatically by some heat actuated device. There are types of such shutters which can be installed on a new building in a manner that would not in any way disfigure the building. Upon existing buildings the problem is more serious, and is one which is severely worrying numerous owners. Rolling shutters can be installed, but require rather unsightly drums placed over the windows on the outside of the wall.

The question whether such protection is warranted or not is a matter which must be decided for each building based upon the risk at stake. It is pretty certain that the owners of the C., B. & Q. building, could they have foreseen the catastrophe which impended, would not have hesitated a day in providing the best double protection known for their windows. They say it will take years and great expense to replace the maps and other papers destroyed.

As before stated, each owner must decide for himself whether he can afford to take the chance of accepting inferior or sub-standard protection of any kind. The risk can easily be determined, and he is not wise who knowingly avoids consideration of the responsibility involved. (Applause.)

THE CHAIRMAN: Mr. Woolson has certainly settled one proposition. I never knew why it was I could not come out even on a fire. Evidently it was an honest fire. (Laughter.)

CAPTAIN M. W. MCINTYRE, Cincinnati: I accompanied Captain Conway to Atlantic City and heard your speech on the subject of fire prevention. After I left Atlantic City, we got busy with the sprinkler system to see what it would cost to establish a sprinkler system on the outside of the building from the eleventh to the seventeenth floor, inclusive, covering three hundred windows. We also got in touch with the Roll Curtain people, and also with the manufacturers of ordinary shutters. At the present time we are working along those lines for protecting three hundred windows on the upper floors.

We find from the sprinkler people that it is necessary to install pumps and connections to the street for the fire department to pump from—a pipe nine to ten inches in diameter—because it means three thousand gallons of water per minute to cover the three hundred windows. We are fortunate to have a ten, twelve, and twenty-inch main connected by a high-pressure

twenty-inch main. The fire department has assured us that there will be sufficient water for any purpose, including a general conflagration of the territory. The installation cost will be in the neighborhood of \$35,000.

The Roll Curtain people are a little chary about putting on the curtains on account of the expansion from the heat and the problem of fastening onto the terra cotta, which does not afford sufficient boltage to take care of the expansion. Bolts probably will have to go into the steel, which will mean removing the terra cotta.

The shutters on the outside of the building, which will not be automatic, will cost in the neighborhood of \$50,000. This is almost prohibitive.

Coming back to the installation of wire glass, we will have to remove the sash, the rim, and everything in the window to put in metal windows. It will cost in the neighborhood of \$200 to \$250 per window. That does not include the plastering and re-tinting of the walls in that part of the building.

Just what we will do for fire protection has not been determined, but probably we will take the present sash, cut the frame in two, place wire glass therein so the lights will be small, and put a sprinkler system on the outside of the building.

When I get back home I expect to have the different contracts and will be able to decide as to the form of protection for the building. We realize the hazard on two sides of the building, and must protect the records of the company.

MR. WOOLSON: That information is very valuable, indeed.

CAPTAIN MCINTYRE: I can realize from the drawings for the roll curtains and certain specifications handed to me, that in new buildings it is possible to install roll curtains over the windows within the plaster, so they will not be seen from the outside or inside of the room.

PRESIDENT COLEY: It is a \$100,000 job.

CAPTAIN MCINTYRE: Practically.

PRESIDENT COLEY: Can you afford to purchase or lease the adjoining hazards and tear them down?

CAPTAIN MCINTYRE: It would not be possible, because it would take probably \$1,500,000 to purchase the property on the two sides.

PRESIDENT COLEY: Couldn't you tear them down and improve the property and make a certain income? The difference between your income received and the interest on the investment would be less than \$100,000.

CAPTAIN MCINTYRE: On Fourth street it probably would cost a million dollars; on the south, probably \$500,000. To improve the property would mean an additional investment of seven to ten million dollars. The State of Ohio insurance laws do not

permit an insurance company to erect a building except for its own purposes, and not for profit. Otherwise we would take it under consideration.

CHARLES S. HOLBROOK, Portland: There is one point of view in this matter which has impressed me very much, especially since the Burlington fire. Whenever we have a large fire in the business center of the city, the policy immediately seems to be to pile on the office building more expense—sometimes to a degree which is more than it can stand. I think every building should have fire protection to the degree it is affected by its surroundings. Instead of trying to put on all kinds of protection in a city like New York, where building after building eliminates every possible fire risk, concentrate our attention on the fire risks about us. I think Mr. Coley has touched the thing on the head. The C., B. & Q. building saved Chicago thousands of dollars of further damage. If they would pay more attention to studying the barn and the six-story shack around the office building, or even buying the adjoining property and tearing it down, we would be better off. We are constantly putting in every conceivable contrivance, and we will still be unprotected against the conflagration. I think the office building should not assume all the responsibility. (Applause.)

CAPTAIN MCINTYRE: Captain Conway of the Salvage Corps advocates that a hazard should be made to pay for the hazard. In other words, they should tear the building down themselves rather than make somebody else pay for it. Let us try to have a law that where a building is proven a hazard, they must remove it themselves.

EUGENE N. FRITZ, San Francisco: The Spreckles mansion is the most expensive home in San Francisco. They had roll curtains installed in this mansion. The fire reached the Spreckles mansion two days after it started, and the house was destroyed.

D. M. ROWE, Dayton: It might be interesting for me to tell of a fire in Dayton in a fireproof building. There is a block containing probably twelve stores. The building is four stories high. Each section is divided by a fireproof wall. In the center of this block is a wholesale hat store, and in the spring, this store was filled with straw hats. On the second floor was a long table piled up with hats. On either side were shelves containing them in boxes. On Saturday when the store was closed, the shades were pulled down at the windows and people went away with everything apparently all right. Evidently someone had thrown a lighted cigarette and it lit in this pile of hats on the center table in the second floor. Next day was Sunday and the next a holiday. A fire started and burned nearly all this stock in the central part of this room—118 by 150 feet. The fire was so intense it scorched the finish at both ends of the room. It melted the fastenings to the fire door at the stairway and the elevators and

they dropped. That fire burned up the oxygen in the room and died out and nobody knew there was a fire until Tuesday morning when they came to open up the store. (Applause.)

EDWARD M. APPLGARTH, San Francisco: I would like to ask if a waste basket fire is not one of the most serious hazards for fires started within the office building?

MR. WOOLSON: I do not know as I can give you figures, but it is a very common cause. We frequently hear of a man leaving his office, or some careless boy dropping a match or cigarette into the basket and going out, and the room is on fire.

One of the worst things we have to contend with is that type of match where the glow will hang on the head. I have counted a minute, but half to three-quarters is long enough. Most men will not hold a match that long. I think there is one of our serious hazards.

MR. APPLGARTH: I believe that is something we as building managers can do something about without much trouble. The only reason we do not do it is because we do not think of it. The ordinary waste basket will start a fire rapidly. A solid metal basket with closed bottom will probably burn itself out without damage to the room. I believe the Fire Prevention Bureau has figures to show you can drop a match in a solid metal basket and let the paper burn, and it won't light a desk within a foot of it. The open basket will start everything in the room. I think we should prohibit the use of any but a certain type of metal baskets. The tenant will gladly co-operate because he does not want to lose a \$300 desk for the sake of buying a dollar basket.

ANDREW JOHNSTONE, Philadelphia: Why not leave the waste basket alone? It never started a fire itself. Why not get down to the cause of the fire and eliminate the cigarettes? (Applause.)

MR. GREEN: There is a question growing very rapidly in this country as to the use of fuel oil in buildings. I know from experience that fire underwriters have not reached a decision on that matter. I would like to know if there has been a recent decision reached as to which is more hazardous—a properly installed fuel oil system or coal?

MR. WOOLSON: I cannot give you statistics as to that. We have prepared rules for the use of fuel oil in buildings. You can get copies by writing for them. I devote my attention entirely to construction matters.

MR. APPLGARTH: During the San Francisco fire, the tanks of fuel oil buried under the ground went through the fire.

MR. WOOLSON: The present rules of the National Board of Fire Underwriters do not put the two under the same category.

PRESIDENT COLEY: When I approached Mr. Woolson to present this paper he was a little reluctant to take the time to do it. After I explained to him what our Association stood for and its make-up, he consented very gladly. In the discussion he emphasized this fact, that he felt our National Association could very materially assist the Department of Commerce, of which Mr. Hoover is Secretary, and under which Mr. Woolson is serving on the Building Code Committee. I would like him to explain the great variations in the various city building codes as to live load requirements.

There is no accurate data at hand as to the live load that exists in a building; and there is nobody I know of better qualified or more able to present that data to the United States government than ourselves. Before this meeting adjourns, I want by resolution to agree that this Association will endeavor actually to weigh up certain pieces of furniture in our buildings, and present through our office or the Secretary accurate information as to the live load in our buildings, and further that we turn over the results to the Government through Mr. Woolson's committee.

MR. WOOLSON: I am very grateful for the remarks your President has made, for we do need assistance. We are crying in the wilderness for assistance. The situation is this: About a year ago, Secretary Hoover decided something should be done to unify the building laws of the United States. The architects and engineers find the conditions in one city do not harmonize with those in another, and the cost is more in one city than another, with many requirements unnecessarily severe in all cities.

We organized the Building Code Committee, of which I am chairman. He selected an excellent corps of architects and engineers from this side of the Mississippi, and we have been at work for a year. Our first work has been centered upon the minimum construction requirements for small dwelling houses. Secretary Hoover's idea was we should do something to stimulate the construction of such buildings because of the great scarcity. The first report was sent out two months ago to a selected list of architects and engineers, and we have back now the reaction from it. It was sent for criticism. The committee is revising the report in the light of the criticism received. As soon as it is completed it will go to the public printer and be put in pamphlet form for general distribution.

The committee is not trying to put anything over. It has nothing to sell or any ideas of its own which it wishes to promulgate to the public. We want to find out what the technical public thinks should be done with certain building requirements; get the average, and recommend it as a law. There is no police power behind these recommendations, but they will carry a good deal of force because we are scratching the country with a fine-

tooth comb to get the information. Then we will establish to the best of our ability what we think the requirements should be and send it out and let the public hit it. If we are too high, we will lower it. If not, we will raise it to what the public thinks is a fair consideration, and so give the public the benefit of a standard requirement.

The next thing we will take up will be other types of buildings—the question of the thickness of walls for your office building, the reinforced concrete, the steel and timber braces, etc.

One of the factors is the question of floor loads. I have had analysis made of 109 building codes, and I find for office buildings the floor load requirements for first floor vary from 50 to 160 pounds. It depends upon where you build your building. For upper stories it varies from 40 to 80 pounds. If 40 or 50 pounds is good for one city, it is good for all other cities, as I see it, unless you have special occupancy with something specially heavy. There should be some figure made which would be good for all cities. If we can get that, it will save a great deal of expense, because we are not having office buildings fall down. I have not heard of any floors collapsing. If 70 pounds is good for the ground floor of one hundred office buildings, why make others put in 160 pounds? What the figure is we do not know, and we have no means of finding out unless men interested in the subject will help us. We have had some splendid assistance upon other subjects from industrial organizations. We know what the human load is. But what is the average load of the office building of today with its metal filing cases and the ordinary type of office furniture you find?

Mr. Coley modestly refrained from saying he would undertake to give us figures upon that splendid office building with which he is connected—have some actual weighing made of office buildings upon certain floors. If we could know the type of furniture and the size, it is easy after that. We want definite figures. We would like to put the data before the public and recommend a change that will reduce the floor loads twenty-five pounds per square foot. It will make an incentive to build more office buildings, because it will reduce their cost. It will save a great many tons of metal in the ordinary steel constructed building.

The committees are all serving gratuitously. They are very busy men. I put in nearly one-half of my time this year purely through altruistic motives. There are times we have a certain responsibility to the public, and when we are in a place to do that thing and no one else can do it as well, it is our duty to do it. I should appreciate it if you would help us out. (Applause.)

THE PRESIDENT: When Mr. Woolson made the remark some definite figures would cheapen the building and create new office buildings, I heard a titter go through the audience. When we

started this Association fourteen years ago, we were a lot of narrow-minded building managers. Here we have an opportunity to make a real contribution to one of the departments of this government, and we cannot be narrow-minded any more than we could try to go around and stagnate the development of architecture and building construction in your building. We would go out of existence immediately. This Association could not live two years if we should proceed on a policy of holding back, rather than promoting. We must be progressive and be in the band. This is an opportunity for us to be progressive and big-minded—not for ourselves, but for our children and the children of our present owners; to make it possible for them to develop their buildings cheaper than today by all the tricks of the trade.

In Mr. Voorhees' chart yesterday I saw a certain strata through that shaded chart representing the steel cost. It is the only strata to be affected by this information disseminated throughout the country. If you do not give this information, you may be doing your city great injustice. If it cannot produce an office for fifty cents a square foot, some other city can, and the manufacturer in the country district is going to open an office in the city which has the low cost building requirements, and the other cities with the high cost building requirements cannot compete. So it may be you who will lose the opportunity to get the offices of the big manufacturer.

Look at this problem broadly, and do not let it go on our records that we would tend to restrict for a selfish reason the construction of office building in the future. You cannot do it. Fifteen thousand men could not do it. You might as well look it squarely in the face, and let us go on record before the public of this country as real contributors toward a progressive idea. (Applause.)

CAPTAIN MCINTYRE: I will pledge the Cincinnati Association to assist you, and if they do not, I will have the information for you from the Union Central Building.

MR. WOOLSON: I thank you. That is what I call real service. If you are inclined to help us out, your name need not appear or may appear, just as you like. All we are after are facts. We want to know the kind of stuff that is weighed and the details of it as you do it so we will have something to measure by. We are trying to establish a yard stick. If inclined to help us, I wish you would either give the facts to us or to Mr. Coley so that we can keep in touch with you while this work is going on and be of mutual assistance. We would be glad to do it through the Committee at Washington.

THE CHAIRMAN: Be absolutely assured you will have the full cooperation of the National Association.

MR. WOOLSON: I told Secretary Hoover last week I was coming out here to have a talk to this body of men. He said, "Go

to it!" and added, "I hope we can get actual figures, because I can realize what you are up against." He does not want to go out with an opinion based upon facts now existing. Apparently they are about 90 per cent copy. Somebody has established the code and we copied it. It is time for us to have some facts.

RAE T. SMITH, San Francisco: Is there some method of arriving at these weights? I think it should be uniform before it is turned in.

MR. WOOLSON: We have no data upon it—practically none. Each man must solve the problem for himself.

CAPTAIN MCINTYRE: Can't you work it on the square foot basis?

ANDREW STEERS, Seattle: Wouldn't it be helpful if Mr. Woolson's committee would prepare a questionnaire of some kind to get the information he desired? We might supply information not in conformity with what the code requires.

MR. WOOLSON: I would be glad to prepare such a questionnaire if it can be distributed through your Bulletin. I cannot say anything further than to take a typical floor and take an office on that floor and weigh the things that are in it. Maybe it means a platform scale and two or three men to weigh them. The weights of desks and filing cases are known. Perhaps the weights of filing cases filled may be known. We need those things.

MR. APPLGARTH: I would like to ask if it would not be practical if we had a committee from this Association to tabulate a list of the furnishings found in office buildings, with the unit of weights. You would figure on loading to 75 per cent of capacity. We might weigh a floor of a tenant who had only moved in. We should furnish capacity. We could furnish actual figures for different makes of desks, chairs, etc., then your men could list everything on the floors. We could figure from our actual figures the weight of those articles, and he would furnish us the square foot area. I think that would simplify it for the members. It would disturb the tenant's stuff sufficiently to weigh it.

MR. WOOLSON: I think that is a very good idea and hope it can be promulgated.

JOHN H. HALL, Cincinnati: In regard to dwelling houses—is it possible to get that document you spoke about?

MR. WOOLSON: As soon as it is revised and printed.

MR. HALL: We are very much interested, because we are attempting to build a town of dwellings.

MR. WOOLSON: We have a sub-committee on plumbing which has been at work for a year—the necessary requirements

for the plumbing of such houses. The book may be had upon request. It will not be ready for distribution before September.

THE CHAIRMAN: We want to thank you for a paper of unusual merit, and something that will be a real addition to our proceedings. (Applause.)

OSCAR D. GREEN, Baltimore: In connection with what Mr. Dickinson had to say, I should like to add a few words on the experience Baltimore had in connection with the recent elevator code. We were confronted with serious conditions last September in the case of hysteria due mainly to the fact of a death in an elevator accident. There was drastic legislation confronting us and we were compelled to get busy. After holding up the proposed legislation in the city council, we took up with the Bureau of Standards and the Secretary of Commerce the question of the right kind of an elevator ordinance. It is with pride the Baltimore men look back upon the fact in eight months they succeeded in getting a code through which is the first finished article to go into the National Building Code. We were successful in getting through a code that works no hardship on the old building or the one being erected or to be erected, and practically every contingency has been covered. We cooperated with the Department of Commerce and got their views and met the objections of labor, so that we think every point has been covered. I can say it is most pleasing and gratifying that not only the government, but the fire underwriters, who have in fact been trying to impose conditions we knew were not practical, are now willing to cooperate with us.

This Association has practical knowledge and men who can give the real kind of suggestions and advice the Department of Commerce needs. Therefore, I believe if the suggestion were carried out, that a committee be appointed representing the different sections of the country, and this committee should work the next few months with the Department, we would get a code to cover the United States and be a standard for the world. Such a standard would not only be a benefit to ourselves, but to the government, builders, engineers, and other people who do not know the practical conditions confronting us in building operation. (Applause.)

Report of Committee on Taxation

Earle Shultz, Chairman, Chicago

MR. CHAIRMAN AND GENTLEMEN: I have not brought any formal, prepared report, because so many of the committees have reports that would cover the same subject.

Before taking up the specific subject of Taxation, I should like to say a few words about the general work of the service committee. At the beginning of the year we worked out a plan of organizing all service committees by constituting them of the chairmen of the local committees of the affiliated associations. At that time there were 42 local association committees. The last issue of the Bulletin indicates 132 such committees. In other words, the work of the service committees has trebled the committee work of the local associations. I believe that is accomplishing a great work, not only for the National, but also for the local associations. It is of particular value to the newer associations who desire some guides in committee work.

I wish to take this opportunity of expressing our appreciation of the splendid co-operation we have received from the members of these various committees. There will be reports from all committees except Taxation, and Accounting and Exchange.

On the Taxation Committee, I wish to report a little information which has not as yet appeared in the Bulletin. The principal work of the Taxation Committee consisted of two things: First, an attempt to obtain relief from the Excess Profits Tax provision of the new income tax law. The associations certainly co-operated royally in that work. Unfortunately, the amendments which we desired were not passed on until the last minute, when they were poured overboard along with hundreds of other amendments.

The second work was the compilation of information to be used in attempting to establish a larger percentage of depreciation on our income tax statements. The present law defines depreciation as including wear and tear and obsolescence. The Department has taken the stand that obsolescence can only be considered after it has actually taken place, and you must be able to state that your building is to be torn down or used for some entirely different purpose within a specified period before you can set up allowance for obsolescence.

Three Chicago buildings, not satisfied with the rulings of the examiners, have carried their case to the Board of Review and Appeals. They were actively represented by the best attorneys in Chicago. I appeared with them before the Board at Washington in May. The fight was made almost entirely on the ground that obsolescence is a progressive condition and should be taken year

by year the same as physical depreciation. I think we pretty clearly established our case before this Board, although it did not pass down the ruling and will not for thirty to sixty days. I think the attorneys were convinced that if the Board gave a ruling that obsolescence can be taken year by year, that they—the Board—would agree that the useful life of an office building should be not more than forty years. If such a ruling is granted, we will be able to take $2\frac{1}{2}$ per cent depreciation, including obsolescence.

You cannot figure depreciation and obsolescence both. The depreciation percentage is only increased to cover obsolescence. This ruling would enable buildings to revise their income tax statements back to 1918; so that if you have been taking less than $2\frac{1}{2}$ per cent, it will be possible to file amended returns to the government on the basis of $2\frac{1}{2}$ per cent. This percentage applies primarily to first-class office buildings. The question of obsolescence itself applies irrespective of the type of building, because it depends upon shifting in business centers and increase in land values and other elements not depending upon the class of the building. The depreciation element varies in the type of the building.

It is also possible to obtain a larger amount of depreciation by dividing up the value of your building into the building structure proper and the mechanical equipment. The government is allowing larger amounts of depreciation on the latter. While it might be a task to separate those accounts, I believe you will save money by doing it. Certainly every new building should keep its construction costs so that it can tell what the mechanical equipment is as distinguished from the structural.

Accounting and Exchange

In the Accounting and Exchange report, I had hoped we would have a printed report for the convention. We received such a large amount of information it was impossible to tabulate it all in time for this convention. We received 150 returns, and of the 90 buildings reporting last year, some 75 reported this year, which indicates they feel the Accounting and Exchange report was of service to them. If any of you did not send in your returns and will make them out, there will still be time to get them into the report.

(Mr. Shultz then presented a few charts and tables which are not reproduced here, as they will all appear in the complete report of the Accounting and Exchange Committee, to be issued separately in the near future.)

I thank you very much. (Applause.)

THE CHAIRMAN: In line with your work in the Taxation Committee, I want to call attention to a very nice booklet which our friend, Mr. Burton, sent to the convention—a book of forty-six pages, which is about as complete a digest as you can get of the sales tax. It certainly is a valuable little reference book to have on your desk. If you want to know anything about taxation, it is worth while.

MR. SHULTZ: The value of all these studies depends upon the accuracy with which you members keep your own accounts. I think one of the points where we are liable to get into trouble is a lack of uniformity as to what constitutes a rentable square foot. This Association adopted a method of measuring square feet. In some cities I do not believe it is being carried out. If we do not have a uniform basis, of course the value of these figures is lost, because we must be talking about the same thing. I would like to urge the several local associations to take up the question of familiarizing their membership with the National Association's already adopted method of measuring square feet.

I should also like to urge the members to make a more careful study of their power costs. One set of figures from which it is impossible to derive real conclusions is the power cost. It is one of the biggest items except possibly taxes; yet the average building manager makes no attempt to measure accurately his power cost.

MR. APPLGARTH: In figuring your labor cost, do you take the rentable area operated or the gross area?

MR. SHULTZ: The rentable, on these statements of the whole building.

MR. APPLGARTH: I think that is what makes the big discrepancy. In the west we have been unable to make comparisons unless we cut the ground floor out.

T. H. LYNCH, New Orleans: You spoke of obsolescence and said the government would not allow you to deduct until after the equipment became obsolete. Suppose you had a series of elevators not up to standard and they will have to be replaced to meet the standards of the other buildings in the city. Will the government allow for that?

MR. SHULTZ: I think so, if you can state that you will tear them out in two years' time.

E. EVERETT THORPE, New York City: The New York Association recently adopted the standard of measurement to the square foot, recommended by the National Association. (Applause.)

THE CHAIRMAN: We are in receipt of the following wire from Dr. Klein, who was to have read a paper at this session on "Depreciation and Obsolescence":

New York, June 21.

C. T. Coley, President,

National Association of Building Owners and Managers,
Bedford Springs Hotel, Pa.

Impossible for Dr. Klein to arrive at Bedford Springs in time to deliver his paper. We are sending his typed address together with a letter of regret by special delivery, which ought to reach you tomorrow, Thursday morning.

KLEIN, HINDS & FINKE.

The letter to which the telegram refers reads as follows:

New York, June 21, 1922.

Mr. C. T. Coley, President,

National Association of Building Owners and Managers,
Bedford Springs Hotel, Bedford, Pa.

Dear Mr. Coley:

I cannot begin to tell you how I regret that circumstances over which I have no control make it absolutely impossible for me to leave in time to assure my arrival at Bedford Springs to take my place on the very interesting program which you have arranged.

There is only one way in which I can make amends—namely, to offer you the enclosed paper which I intended to deliver, and to say that if the reading of it should result in the raising of any questions, I shall be very happy to respond to them by mail.

Please assure the members of your association that I esteem it a signal honor to have been asked to meet with them, and that I anticipate the pleasure of another opportunity to meet them.

With best wishes to you and your associates,

Cordially yours,

JOSEPH J. KLEIN.

Mr. Klein has gone into detail as to the procedure which the Income Tax Department allows in handling obsolescence and depreciation, and it will be interesting to the members from that score.

Dr. Klein's paper will be read by title.

Depreciation and Obsolescence

Dr. Joseph J. Klein, C. P. A., New York City

You have asked me to address you on the subjects of Depreciation and Obsolescence in their relationship to the problem of the building owner and manager.

A week ago, when I began to cogitate over the choice of material to present, it was my thought to divide the subject into a discussion of depreciation and obsolescence *per se* and then to treat the subjects from the point of view of accountancy and taxation. Since then there has been brought to my notice the excellent study by your own vice-president, Mr. Earle Shultz, which I assume is familiar to all of you. It is a fair assumption that men at home with the subject as developed by Mr. Shultz in his excellent treatment of "The Effect of Obsolescence on the Useful and Profitable Life of Office Buildings," are pastmasters of the elements of depreciation and obsolescence.



Accordingly, I shall take it for granted that you have a degree of familiarity with the elements of the subject sufficient to warrant an omission of the fundamental concepts of depreciation and obsolescence. I take it that all of you have in mind the familiar distinction between depreciation and obsolescence, namely, that depreciation, as a practical matter, is measured by such factors as the passing of time, the wear and tear resulting from use and attrition, and that, in general, the ravages of depreciation are ordinarily constant and gradual.

Obsolescence, on the other hand, connotes much more sudden and uncertain displacements or losses in value. In the arts, its manifestations are closely associated with the progress of inventions; we think of it as resulting in destruction of values due not to physical uselessness, but rather to decreased worth predicated on a comparison of the greater efficiency of new devices over older ones.

From this point of view, obsolescence would not be of interest, at first blush, to the problem of the building owner and manager. A little reflection, however, will tend to convince that Mr. Shultz' analysis of the factors which bring about obsolescence of office buildings is well taken. Changes in neighborhood, a recurring phenomenon in urban life, leave in their trail

real shrinkages of values, while, on the other hand, they bring unexpected riches to fortunate owners. The desire to flock to newer buildings equally surely, in many instances, affect the values of perfectly good buildings not quite so new. The removal from a well-defined center to another by a prominent factor in a given industry has been known to result in such a shifting of demand for office space as almost overnight to extinguish values. And, as a fourth factor in obsolescence, there must be mentioned the fact that increases in land values may make unprofitable the continuing in use of a building otherwise perfectly tenable. Surely, it is unnecessary, in this presence, to summarize more than has already been done in passing, the factors which determine depreciation.

As has been observed by others in another connection, depreciation has been with us from the beginning of time. It began with time and the elements, and has persisted as they have persisted. Despite its antiquity, it has not, in a practical way, been given the consideration which age alone would, *a priori*, lead us to believe would have been received by the subject.

While I do not intend to trace the historical development of this subject, it should be interesting to recall how recent is the origin of public interest in depreciation. When public rate-fixing bodies first began to wrestle with the problem of fair returns on public utility investments, organizations which had charged off depreciation only in the years when profits "permitted," began to insist that depreciation was as positive an expense as more tangible and more easily recognized items, and that due allowance had to be made for this factor in determining rates fair alike to consumer and to the investor.

A similar problem confronted real estate owners in connection with not altogether popular rent-fixing policies of certain localities. Owners of buildings who had been almost oblivious of the existence of depreciation as a practical accounting matter, learned to know it at first hand and to insist upon its recognition by courts and by tenants.

Even before the day of rent fixing, owners of improved real property came to appreciate the importance of depreciation in connection with income tax returns. Because of the limitations of time, I shall restrict this paper to a brief consideration of depreciation and obsolescence from the points of view of account and taxation.

As a matter of accounting, the existence of depreciation and obsolescence must be constantly kept in mind. Obviously, proper balance sheets and income statements cannot be prepared in the absence of correct depreciation and obsolescence data. Two factors are necessary for their proper determination, namely, the base to be depreciated and the rate of annual depreciation. By the depreciation base is meant every cost to be written off or extinguished as a result of the physical fact that the value, repre-

sented by original cost or some similar amount, is dissipated in time or due to wear, tear and other destructive forces.

Closely related and sometimes almost inseparably associated with technical depreciation is the loss before referred to as due to obsolescence.

While engineers and accountants agree that the calculation of depreciation is by no means a difficult task, they are equally in accord that it is almost impossible to calculate the proper annual write-off for obsolescence. This difficulty is due almost exclusively to the fact that figures with respect to obsolescence losses are not available nearly to the same extent that corresponding depreciation data are. An attempt to supply the omission has been made, only in part, unfortunately, by the paper of Mr. Shultz before referred to. If it is in order, I would recommend that appropriate committees of this and of other similar bodies might well apply themselves to the task of collecting data on the basis of which obsolescence tables, similar to the familiar depreciation tables, might be prepared. Mr. Shultz and his committee have demonstrated that a survey is by no means impossible; the benefits to be derived by the establishment of such data are real and are surely appreciated by this gathering.

Merely in passing, permit me to say that the form of entry with respect to the depreciation or obsolescence loss is quite immaterial. The general form consists of a charge or debit to some profit and loss account, usually designated as "Depreciation Account," and a corresponding credit to some reserve account, frequently denominated "Reserve for Depreciation" or "Depreciation Reserve Account." This reserve account, taken in connection with the asset account, ordinarily indicates the book value of given property. For example, if land were purchased for \$300,000 and an office building erected thereon costing \$700,000, the total original cost would be represented by \$1,000,000. If, at the end of four years, the Depreciation Reserve Account amounts to \$60,000, the book value of the property (not its equity) would be represented by the difference between \$1,000,000 and \$60,000, or by \$940,000.

In connection with the determination of annual depreciation, and this with as much relevancy to taxation as to accounting, a common fault has been the failure to distinguish between the building as a whole and its component parts. This led to such unscientific procedure as annually to depreciate the cost of the entire superstructure at a flat rate per cent, as, for example, 1%, 1½%, 2%, 2½%, etc.

As a matter of fact, the building as a whole depreciates unequally. The boiler, for example, may not last more than four or five years. The frame may last for fifty or sixty years, although its useful life may be much less than this. Elevators or "lifts," as our English brothers call them, may have a physical

life of fifteen or twenty years, but a useful life, due to obsolescence, of not more than eight or ten years. Thus, certain parts of the building may have a useful life of only a few years, while other parts may have a useful life of twenty-five or thirty years.

In order to determine depreciation and obsolescence losses scientifically, real estate owners will sooner or later have to do what experts at other lines have done, namely, establish depreciation rates with respect to the more important individual items which compose the building as a whole. In other words, the suggestion now is to abandon the almost universal practice of depreciating the entire structure as a unit and to substitute therefor depreciation with respect to specific items of a building. Here also, appropriate committees of this body should find a useful and fruitful field of activity.

Now let us devote the remainder of the time at our disposal to a consideration of the relationship between our subject and federal income taxation.

Our modern federal income tax laws date from 1913, although it may be said that so far as corporations are concerned, 1909 is the real natal year. The Special Excise Tax law of 1909 allowed as an expense to *corporations* owning real property, a "reasonable allowance for depreciation." A similar provision is found with respect to *all* taxpayers in the 1913 Act, which applied to the years 1913, 1914 and 1915, in the Act of 1916, which applied to that year, and in the Act of 1917, which applied to that year. The Act of 1918 specifically provided for the inclusion in depreciation of the factor of obsolescence. This provision has been continued in the Act of 1921.

The language employed in the law is about as clear as any part of the law. Listen to it. I am citing from the Act of 1918, Section 234, which enumerates the deductions allowed:

"A reasonable allowance for the exhaustion, wear and tear of property used in the trade or business including a reasonable allowance for obsolescence."

The language is identical in the 1921 Act. But what does this language mean? In the absence of court decisions, the word of the Commissioner of Internal Revenue, expressed in the form of Treasury regulations, Treasury decisions and all other official promulgations, govern. His ruling or interpretations are not only worthy of respect and attention, but have practically the binding effect of law, unless superseded by a legal decision which occurs when the Commissioner's rulings are contrary to the fair meaning of the language of the law itself. As most of you know, the taxpayer, who believes that he is aggrieved by the Commissioner's ruling, must nevertheless abide by it in the preparation of the return. He may pay the tax under protest, ask for a refund and, if denied, sue for a recovery with interest.

It would be an interesting study to summarize the Treasury's

attitude toward the problem of building depreciation and to compare such attitude with the meagre court decisions on the subject. Time will only permit of a brief survey.

Under a 1913 law, a jury in the federal district court decided in the case of *Cohen v. Lowe*, Collector, that a three (3) per cent rate on a modern apartment house was sufficient. Remember that this was under the 1913 law which did not specifically recognize obsolescence. Parenthetically, I am not at all certain that depreciation was not always intended to include obsolescence, but the inquiry is theoretical except with respect to the 1917 Act which will soon be outlawed by limitation. The courts would undoubtedly hold that, under the 1913 Act, there was *no* warrant for the Commissioner's insistence that as a condition precedent to the taxpayer's deduction of depreciation, book entries properly charging off the desired amount should be made. While the Commissioner was justified, on the basis of good accounting practice, to insist that the books should reflect depreciation write-off, there was no warrant for such insistence in either the 1909 or in the 1913 acts. Nevertheless, the Department has consistently adhered to the policy of having depreciation entries made in the books before allowing the deduction. I believe that when special reason exists, arrangements may be made for special adjustment entries. The law now provides for actual charging off of depreciation.

In a recent case before the Department involving one of the best known office buildings in the world, it was arranged to have the taxpayer take instead of the one (1) per cent originally proposed by the Bureau and the two (2) per cent taken by the taxpayer, one and three-quarter ($1\frac{3}{4}$) per cent on the cost of the stone and steel and varying percentages on the other elements. The Department's decision was predicated on the taxpayers' entering into an agreement to pass appropriate entries on its books. It had at first refused to do so on the ground that land appreciation more than compensated for building depreciation. An amicable settlement was finally reached.

The law does not attempt to differentiate between types of physical property subject to depreciation and obsolescence. It provides for the deduction with respect to all "property used in the trade or business." The Bureau, however, attempts to distinguish between buildings as a unit and all other physical property subject to depreciation and obsolescence. It applies quite a unique test to buildings when it provides that what you and I call obsolescence shall not be recognized, except when the property is "permanently abandoned or permanently devoted to a radically different use." I venture the prediction that sooner or later the Bureau will modify its stand so that obsolescence of buildings will be tested by the same norms as are applied to other types of physical property. In this connection, nothing would

so effectively tend to speed the change as additional studies of the kind undertaken by Mr. Shultz and his committee.

The Bureau permits adjustments to be made where the taxpayer discovers that the depreciation previously taken has been incorrect. The procedure is to revise *future* depreciation rates so that during the balance of the estimated useful life, the difference between book value and estimated scrap value will be exhausted. If the known abandonment date can be even approximately ascertained, the obsolescence loss can be taken into consideration in the determination of annual depreciation and obsolescence rates. In this way the loss may be spread over a number of years instead of being necessarily reserved until fully realized when the building is either abandoned or torn down. Accordingly, the apparent harshness referred to in the preceding paragraph is much modified.

Permit me, at this point, to allude to a source of confusion which I have met on a number of occasions. Many taxpayers know that when they acquire property consisting of land and old buildings which are razed soon after acquisition, no write-off is permitted by the Revenue Bureau with respect to such destruction. But when buildings are torn down after having been used by the taxpayer in his trade or business for some time, the loss measured by the difference between book value (sometimes modified by March 1, 1919, adjustment) and the recovery from the sale of the old material, if any, is deductible in the year when the destruction occurs. I have found that the procedure here outlined is sometimes a surprise to taxpayers. That the Bureau's attitude is neither inconsistent nor illogical must be apparent to all who give any thought to the situation.

I do not wish unduly to extend this paper by referring to the many additional items which offer themselves for discussion. Let me conclude by reference to two additional items, repairs and carrying charges.

I wonder how many of you have been disturbed by revenue agents who argued that repairs could not be deducted when depreciation was also charged off. Of course, no warrant existed for such action on the part of revenue agents. Fortunately, fewer instances of such attitude now occur due to the better understanding of the law. It appears hardly necessary to point out that depreciation occurs even when repairs are made. A repaired old building, everything else being equal, is not worth as much as a new building. This is as true of a building as it is of an engine or of an automobile. Incidentally, the close relationship between obsolescence and depreciation is seen in the illustration just offered; the repaired engine and the new one may be equally in good working order; there is a real practical difference in value, however. Argue that the difference is due to depreciation or to obsolescence; the cause—if indeed there is a single cause—

is of no particular moment. Formerly, it was optional with the taxpayer to capitalize the excess of carrying charges over income during the preliminary stages of a building operation. It is now held that losses may be deducted only in the year in which they occur. The change in procedure may often prove costly to the taxpayer, but there is much to justify the Department in its new ruling.

I wish to thank you for your attention. If I may be privileged to make a friendly suggestion, I should like to urge you to continue your studies in depreciation and obsolescence. Of course, I do not undertake to speak for the Revenue Bureau; I have no official connection with it. I am confident, nevertheless, that the Bureau would gladly receive scientific studies along the lines suggested, and that such studies would receive the credit to which they were entitled. It is effort along such lines that justifies the existence of organizations such as yours.

When President Coley invited me to prepare this paper, he informed me that the penalty which every speaker who appeared before this body was called upon to pay, consisted of answering such questions as might occur to those present. I undertook the task with that knowledge and understanding. As there is no visible means of escape, I ask you, "What are your questions?"

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THE PRESIDENT: We should be finished with all the regular business of the association by tomorrow at one o'clock. Adjournment was then declared until 2:30 p. m.

Friday Afternoon Session

June 23, 1922

The Friday afternoon session was called to order by President Coley at 2:30.

PRESIDENT COLEY: As the first order of business this afternoon we will have the report of the Employment Committee of which Mr. Class of New York is chairman.

Report of Committee on Employment

William H. Class, New York City

Without any extended preliminary remarks, I will simply state there may be some radical statements made with reference to the labor problem which possibly may have been influenced by the Committee Chairman himself. If so, I hope you will excuse it, realizing with a committee whose members are scattered throughout the country, it is impossible to hold meetings except by correspondence, which is very unsatisfactory. Therefore the initiative must be employed by the Chairman, and if by chance there are some individual opinions expressed, they at least have been approved by the Committee, while they may not be the opinion of each individual member. (Reads.)

To the National Association of Building Owners and Managers:

The field of work for the Committee on Employment, as outlined by the Directors, was very comprehensive, but in commencing its work no attempt has been made, however, by the Committee to accomplish more than could reasonably be expected to be completed in the short time the Committee, as now constituted, has existed.

The plan as adopted by the Committee has been to extend the work as the necessity or desirability of so doing appeared. The work undertaken to date is as follows:

1. Collection of existing data with relation to wages and placing such data at the disposition of the Local Associations and all members of the Association.
2. Recommendations to be made from data compiled from the information furnished under No. 1.
3. Consideration of requests for advice and assistance submitted from time to time by Local Associations and others.

COLLECTION OF DATA

In January, 1922, a questionnaire was prepared and sent to all the Local Associations throughout the country, affiliated and others, asking for information as to the wages paid the several classes of building help, together with such further information, with relation to overtime, vacations, holiday payments, etc., that would affect such wages. Answers to these questionnaires were returned from 17 Associations, and for the information of members of the Association are herewith tabulated:

TABLE I—AVERAGE RATE OF PAY—CENTS PER HOUR

Wages Paid by Cities for	New York	Chicago	Philadelphia	Detroit	San Francisco	Cincinnati	New Orleans	Minneapolis	Seattle	Portland	Denver	Louisville	Atlanta	Dayton	Duluth	Jacksonville	Cleveland
Supt.....	83.3 168.3							64.4	69.7	48.1 118.2	72. 144.	30. 50.	90.	103.	96.2 142.		68. 94.
Foreman.....	46.7 63.3				52.9 84.1		28.8 60.1	55.3	53.9	45.7 60.		30.		41.			
(Night).....					43.2 52.9				55.8	43.2 55.2		48.					
Engineer.....	89	75	46		72.1	50	60.1	79.6	64	52.8	53.4	32.7	78.	85.5	67.3	37.5	84.
(Day).....	166.7	90	85		144.2	82.5	100.			84	72	45.			96	83.5	120.
(Assistant).....	58.3 94.	70. 80.	32.3 77.8		72.1 84.1		36.6 67.3	61.5		47. 84.	47. 57.7		54.2	64.	55.3 67.3		43. 62.
(Night).....		75. 90.	36.8 68.								47. 57.7			64.			62. 87.
Fireman.....	*50.	67.5	27		60.1	31.6	36.1	49.5		52.8	48.				36.3	32.5	
(Day).....	69.	72.5	71.		77.	68.1	52.1			57.6	53.	33.			63.5	43.8	
(Night).....		67.5 72.5	21.4 71.					49.5			48. 53.	28.2 37.5			36.3 63.5		
Coal Passer.....	42. 62.5	60. 65.						43.2									

TABLE I—AVERAGE RATE OF PAY—CENTS PER HOUR—Continued

Wages Paid by Cities for	New York	Chicago	Philadelphia	Detroit	San Francisco	Cincinnati	New Orleans	Minneapolis	Seattle	Portland	Denver	Louisville	Atlanta	Dayton	Duluth	Jacksonville	Cleveland
Porter (Head).....	46.7 63.3	..... .....	35. 74.	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	43.3 67.3	..... .....	..... .....	32.5 51.	..... .....	..... .....	52. 52.
Porters.....	37. 43.3	..... .....	27.6 43.2	38.5 48.1	..... .....	..... .....	24.0 36.0	..... .....	..... .....	..... .....	34.7 43.3	30. 34.2	..... .....	..... .....	..... .....	..... .....	..... .....
Janitor (Day).....	..... .....	46.4 50.4	..... .....	..... .....	43.2	30. 46.4	..... .....	41.2	48.8	36. 47.2	34.7 45.7	25. 27.8	27.5	34.2 44.5	38.5 47.	31.3 37.6	38. 50.
(Night).....	..... .....	46.4 50.4	..... .....	..... .....	43.2 45.7	..... .....	..... .....	..... .....	46.3 49.	32. 45.	38.5 45.7	30. 34.1	27.1 .....	..... .....	..... 43.3	..... .....	38. 42.
Window Cleaner.....	42. 60.	48.4 52.4	27.5 40.7	..... .....	..... .....	39.6 45.9	29.1 36.1	48.1	51.7	42.7 44.5	..... .....	35. 37.	29.6	33.3 37.	..... .....	..... 50.	52. 60.
Office Cleaner.....	35. 50.	36. 40.	18. 43.	29. 35.4	..... .....	..... .....	..... .....	..... .....	..... .....	28.5 43.	26.5 37.	..... .....	..... .....	33.3 50.	..... .....	14.6 31.3	..... .....
Scrubbers, Women.....	..... .....	36. 40.	25. 33.3	..... .....	..... .....	25. 30.	20.9 29.1	22.9 .....	..... .....	28.5 43.	26.5	23. 30.	14.8	33.3 50.	24. 31.3	16.7 33.4	30. 34.
Vacuum Man.....	32.2 50.	46.4 50.4	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	35.2 43.2	..... .....	..... .....	..... .....	..... 37.	..... .....	..... .....	..... 48.

It is realized that a comparison of these figures is difficult by reason of the great variation between the minimum and maximum wages paid the same classes of employees, which difference is apparent even in the individual city, where seemingly the labor situation is under some control. These conditions may, however, be easily accounted for when it is understood that the information furnished, which covers office buildings only, was for all classes of such buildings.

REQUESTS FOR ADVICE

All requests for advice and assistance have been promptly answered by your Committee. We believe that the National Committee can be of considerable help in distributing information and of great assistance to Local Associations. Our regret is that more requests for such advice and assistance have not been received.

GENERAL

From such study as your Committee has been able to give the subject, it has been found that during and subsequent to the war, that the wages in office buildings have not been advanced over pre-war prices in the same proportion as found in other industries and the same holds true with respect to reductions in wages. There appears to be a disinclination to reduce wages—prompted by a fear of being called upon to make reductions in rentals. It is the opinion of your Committee that the consideration of wages is separate and distinct from the consideration of rentals, and yet, the former, being a part of the cost of operating your building, should and does influence the latter; but, disregarding this influence, we believe that labor should be paid wages sufficient to maintain itself in a decent and reasonable manner.

As we look back to the time during the war, when wages started upward, we will remember that the reasons for such advances were principally to meet the arguments of the employees, that by reason of the increased cost of living, they were unable to maintain themselves and families. Another factor entering into such increase of labor was the difficulty of obtaining employees, due to the extraordinary demands established by war conditions. We, however, feel that this latter factor was not and should not be as important in considering wages as the former; therefore, it is our opinion that reductions in wages should only be made as the living cost decreases, and not until we can fairly assume that such reductions in living cost will be maintained.

This policy has been consistently followed by one of your Local Associations with excellent results, and at a cost in wages not above that paid in other sections of the country for similar work, and also with the complete avoidance of entanglements with Labor Unions, which usually result in increased wage schedules.

The general conditions of labor appears to be improving. The character of service is decidedly better, and from information that has been furnished the Committee, we are led to believe that replacements are generally being made at a reduced schedule.

Noted below are a number of reports from Chairmen of Local Committees on Employment, recently submitted, and generally indicative of the local situation.

MINNEAPOLIS, MINN.

I have checked over with quite a few of our larger building managers and find the following facts:

There is plenty of help available at the present time and without exception the same wages are being paid that have been in force during the last two or three years, but in several cases more return is being demanded. For instance, where they have been working a nine-hour day they are getting 9½ and 10 hours for the same money and all are demanding a better grade of work than they were able to demand when the help was very scarce and hard to obtain. Where the help for carpenters and painters was on the hour basis at \$1.00 per hour, we are now obtaining the same work for 80c an hour.

In several cases in Twin City buildings they have secured a saving by replacing men elevator operators with female operators, who can be secured at from \$15.00 to \$20.00 per month less wage.

Nothing especially new appears in the labor situation except the general fact that as labor is more plentiful one can pick his help and demand more than he could when there was a shortage, as has been the case in the last few years.

DETROIT, MICH.

Detroit, fortunately, has been and is an open-shop town. We hope to remain in this fortunate situation indefinitely. The buildings here all seem to be able to get the help they wish and are paying approximately the same wages they have been paid for the last two or three years. There were no radical cuts made by the buildings to building employees after the war, which no doubt has a bearing on the employment situation.

DULUTH, MINN.

There has been practically no change in the wages of engineers, firemen, elevator operators, janitors, or of any of the help that is employed in the office buildings here. Wages in these occupations did not go to the heights that they did in other lines during the period of high wages, and as long as rentals have not been reduced, owners and operators are maintaining the wage schedule for their employees. There is, however, a more abundant supply of labor than for some time.

We have no interference from unions as to wages and hours as to any of the building employees. Hours run from 8 to 12, according to the individual agreements. There was an effort made a couple of years ago to unionize the engineers and firemen and make the building operators agree to the closed shop. Duluth is

operating almost entirely on the open-shop basis and the building managers are doing everything to co-operate to that end, believing that it is the only solution for satisfactory operation and management of our properties.

ATLANTA, GA.

There has been no change in the wage scale for the past 12 months of Superintendents, Engineers, Assistant Engineers, Firemen, Night Watchmen. This, too, may include Elevator Starters and Operators, though in a few buildings they may have been slightly reduced.

Reductions of from 10 to 20 per cent have been made by many of the buildings during the past year on Painters, Carpenters, Electricians, Window Washers, Janitors and Scrub Women. This is due to the overflow of help in these various departments.

PORTLAND, OREGON

The changes in wages in Portland have been practically imperceptible. The number of people out of work has made a difference in the general market for labor. But so far as the reduction of wages is concerned, there has been none, except that new employees have been willing to begin work at a somewhat lower schedule than the experienced employees have been getting. On the other hand, the building managers have not seen fit to reduce the wages of those in their employ who make no change.

The situation is such that it is now quite practical to return as far as possible to men operators of elevators. The men are now being found to be generally more satisfactory than the women. In the first place, they are not subject to the regulations of the Welfare Commission as to hours and some other items, and the men that are now employed are giving more efficient service than has been the case since the beginning of the war. Due to these conditions service in the office buildings is being improved from time to time.

NEW YORK, N. Y.

There has been no general disposition among building managers to reduce wages of old employees; new help, however, is being employed at a lower scale—averaging 10 to 15 per cent reduction from the peak.

The Local Committee on Employment recommended that the Association make no reduction of wages at this time, as applied to old help. This report was approved.

Unemployment is not as large as it was a few months ago, but still good help can be obtained readily. The character of work is improving to such an extent that in many places a reduction in force in certain classes of help has been possible.

RECOMMENDATIONS

No work which a National Committee on Employment may do can ever be as effective as the work of a Local Committee, and

from such information as your Committee has been able to gather, it has been found that those cities maintaining an active Committee on Employment have controlled the labor situation remarkably well, particularly noticeable during the period of the war and shortly thereafter, when the demand for labor was at its peak and the consequent demand for wages inclined to be excessive. We would therefore recommend to Local Associations that if there are not now existing active and energetic Committees on Employment, that such be organized—with a close study being made of the wage subject; particularly at this time, when employers are seriously considering the liquidation of labor costs.

We would further recommend that a careful study be made as to the relations of wages to the cost of living, which may be done by comparing pre-war labor costs with present costs, in connection with the tabulation of living costs hereto annexed, and covering 31 cities throughout the country.

It is also recommended that each Local Committee on Employment, as well as members of the Association, sufficiently interested, arrange with the Department of Labor, Bureau of Labor Statistics, to furnish them with statistics which are published from time to time by said Department. It will be found that these statistics will be of great help and benefit in a comprehensive study of the labor situation and result in an intelligent solution.

Your Committee desires at this time to record its appreciation for the great amount of work done by the Executive Secretary, in obtaining and compiling the information with respect to wages as herein published.

Respectfully submitted,

W. H. CLASS, Chairman, New York.

J. S. SHORT, Atlanta.

M. H. HOYT, Denver.

ED. MAEDER, Dayton.

NATHAN T. VIGER, Detroit.

FRED BUCK, Duluth.

E. J. KRAFFT, Minneapolis.

F. J. RALEY, Portland.

W. E. MAIER, Louisville.

W. T. SLOAN, JR., Cincinnati.

E. A. WEST, Indianapolis.

J. MILTON BRANDT, Baltimore.

C. C. OGILVIE, Memphis.

CHANGES IN THE COST OF LIVING

The following represent the changes in the cost of living from December, 1914, to March, 1922, in the cities as shown:

TOTAL FOR CITY	PER CENT OF INCREASE FROM DECEMBER, 1914, TO											
	Dec. 1915	Dec. 1916	Dec. 1917	Dec. 1918	June 1919	Dec. 1919	June 1920	Dec. 1920	May 1921	Sept. 1921	Dec. 1921	Mar. 1922
PHILADELPHIA, PA.....	1.2	14.7	43.8	73.9	76.2	96.5	113.5	100.7	79.8	76.0	74.3	68.2
SAN FRANCISCO and OAKLAND, CAL....	*1.7	8.3	28.6	57.8	65.6	87.8	96.0	85.1	66.7	64.6	63.6	57.5
BALTIMORE, MD.....	*1.4	18.5	51.3	84.7	84.0	98.4	114.3	96.8	77.4	76.5	73.2	67.9
BOSTON, MASS.....	1.6	15.7	38.1	70.6	72.8	92.3	110.7	97.4	74.4	72.8	70.2	61.2
BUFFALO, N. Y.....	3.5	24.4	51.1	80.9	84.2	102.7	121.5	101.7	80.3	78.4	76.8	69.9
CHICAGO, ILL.....	3.0	19.5	41.8	72.2	74.5	100.6	114.6	93.3	78.4	75.3	72.3	65.1
CLEVELAND, OHIO.....	1.4	19.1	42.9	71.4	77.2	95.1	116.8	104.0	84.7	79.9	76.4	66.2
DETROIT, MICH.....	3.5	22.3	49.9	78.0	84.4	107.9	136.0	118.6	93.3	88.0	82.4	74.6
HOUSTON, TEXAS.....	*.3	16.4	44.9	75.7	80.2	101.7	112.2	104.0	79.7	75.0	73.6	67.2
JACKSONVILLE, FLA.....	1.3	14.7	41.6	71.5	77.5	101.5	116.5	106.2	85.8	78.7	75.1	68.0
LOS ANGELES, CAL.....	*1.9	7.7	28.9	58.0	65.1	85.3	101.7	96.7	78.7	76.8	76.4	72.4
MOBILE, ALA.....	*.4	13.8	43.2	71.4	76.6	94.5	107.0	93.3	70.8	67.2	63.6	55.3
NEW YORK, N. Y.....	2.0	14.9	44.7	77.3	79.2	103.8	119.2	101.4	81.7	79.7	78.1	69.9
NORFOLK, VA.....	.6	14.7	45.2	80.7	87.1	107.0	122.2	109.0	88.1	83.9	79.2	71.3
PORTLAND, ORE.....	*3.1	6.1	31.2	64.2	69.2	83.7	100.4	80.3	62.2	60.5	58.3	52.3
SAVANNAH, GA.....	*.2	14.6	42.5	75.0	79.8	98.7	109.4	98.7	77.6	71.3	66.2	56.9
SEATTLE, WASH.....	*1.0	7.4	31.1	69.9	76.9	97.7	110.5	94.1	80.2	75.5	71.5	67.4
WASHINGTON, D. C.....	1.0	14.6	47.3	73.8	71.2	87.6	101.3	87.8	67.1	66.2	63.0	56.8
					(1)	(2)						

*Decrease.

(1) April, 1919.

(2) November, 1919.

CHANGES IN THE COST OF LIVING—Continued

The following represent the changes in the cost of living from December, 1917, to March, 1922, in the cities as shown:

TOTAL FOR CITY	PER CENT OF INCREASE FROM DECEMBER, 1917 TO								
	Dec. 1918	June 1919	Dec. 1919	June 1920	Dec. 1920	May 1921	Sept. 1921	Dec. 1921	Mar. 1922
ATLANTA, GA.....	19.7	23.3	37.9	46.7	38.5	25.2	20.7	18.7	13.8
BIRMINGHAM, ALA.....	17.0	19.8	34.3	41.9	33.3	22.1	19.6	16.2	11.0
CINCINNATI, OHIO.....	17.3	21.1	35.2	47.1	34.7	21.7	18.3	15.3	11.6
DENVER, COLO.....	20.7	25.3	38.2	50.3	38.7	26.9	26.1	24.5	18.5
INDIANAPOLIS, IND.....	19.1	21.1	36.5	50.2	37.6	23.9	22.6	19.3	15.3
KANSAS CITY, MO.....	19.6	20.6	38.2	51.0	39.5	27.3	23.9	22.5	15.3
MEMPHIS, TENN.....	18.3	23.3	35.2	46.4	39.3	26.7	25.1	23.2	19.2
MINNEAPOLIS, MINN.....	15.8	18.8	32.7	43.4	35.7	23.7	21.6	20.7	17.0
NEW ORLEANS, LA.....	17.9	20.7	33.9	41.9	36.7	23.8	23.8	22.7	19.9
PITTSBURGH, PA.....	19.8	21.8	36.2	49.1	39.3	37.7	24.4	22.8	17.4
RICHMOND, VA.....	17.9	20.6	32.0	43.8	33.3	20.2	19.5	18.3	12.9
ST. LOUIS, MO.....	16.7	17.9	34.2	48.9	35.4	23.1	22.0	18.5	14.7
SCRANTON, PA.....	21.9	25.0	37.1	51.5	39.1	28.2	26.3	26.3	20.4

CHANGES IN THE COST OF LIVING—Continued

The following figures are a summarization of the figures in 28 cities, representing the changes in the cost of living from December, 1913, to March, 1922.

PER CENT OF INCREASE FROM 1913 (AVERAGE) TO													
ITEM OF EXPENDITURE	Dec. 1914	Dec. 1915	Dec. 1916	Dec. 1917	Dec. 1918	June 1919	Dec. 1919	June 1920	Dec. 1920	May 1921	Sept. 1921	Dec. 1921	Mar. 1922
Food.....	5.0	5.0	26.0	57.0	87.0	84.0	97.0	119.0	78.0	44.7	53.1	50.0	38.7
Clothing.....	1.0	4.7	20.0	49.1	105.3	114.5	168.7	187.5	158.5	122.6	92.1	84.4	75.5
Housing.....	**	1.5	2.3	.1	9.2	14.2	25.3	34.9	51.1	59.0	60.0	61.0	60.9
Fuel and Light.....	1.0	1.0	8.4	24.1	47.9	45.6	56.8	71.9	94.9	81.6	80.7	81.1	75.8
Furniture.....	4.0	10.6	27.8	50.6	113.6	125.1	163.5	192.7	185.4	147.7	124.7	118.0	106.2
Miscellaneous.....	3.0	7.4	13.3	40.5	65.8	73.2	90.2	101.4	108.8	108.8	107.8	106.8	103.3
TOTAL.....	3.0	5.1	18.3	42.4	74.4	77.3	99.3	116.5	100.4	80.4	77.3	74.3	66.9

**No Change.

THE PRESIDENT: It seems that the work of some department of the United States Government is emphasized every time a man reads a paper or report. The United States Department of Labor has a great deal of valuable information which is useful to us. Many of us do not know the character of such information. Mr. Class has emphasized its value and it will appear in his report.

The owners of your buildings probably are the owners of large industries as well. They read in the newspapers the steel industry has reduced wages 20 per cent, and that certain other large manufacturing interests have done so. They get the feeling that all of the industries in which they are interested should get in line and reduce wages. I think Mr. Class has answered the question by his statement that office building and apartment house employees prior to the war were not paid a wage in proportion to living expenses as in the commercial industries. It took us longer to reach the peak. Toward the end of the war we did reach the peak, and to be fair—and you cannot deal with labor unless you are fair—we necessarily must be slower than the manufacturing industries in reducing our wages. Keep in mind the spirit of our employees—their comfort and peace of mind on the job. Who can work well when his wife is dissatisfied and his children poorly fed and clothed? In dealing with labor, we are dealing with hundreds and thousands of men, women and children, and this is a very important point, in my mind. We must not do these things quickly, but digest them thoroughly, because we are dealing with human lives.

ARTHUR J. HOPPER, New York City: Are there any office buildings that have employed solely men for cleaning?

RAE T. SMITH, San Francisco: In San Francisco we do it mostly. We employed women up to about a year and a half ago. The men do so much better. They work morning and evening—about five hours at night and four in the morning.

CORBIN M. DUNCAN, Little Rock: What nationality?

RAE T. SMITH: They are mixed—mostly foreigners. We are getting better men all the time.

THE PRESIDENT: The proportion of men to women in the far west is greater than east of the Mississippi River, and especially in New York, where we have the female immigrant to call upon.

EDWARD M. APPLGARTH, San Francisco: We have a woman's minimum wage scale, which at present is \$70 a month, based on a 40-hour week. Men check up equivalent to women at \$70. You can get 10,000 feet from men to 7,500 from women. We work broken shift. In doing that there is one factor we must watch out for: that the men do work the full shift. I went downtown one day with one of our members, and I said, "How many of your men are on the job?" We found three out of probably twenty-five.

It was moved the report of the Committee on Employment be accepted and placed on file. The motion carried.

Report of the Insurance Committee

Charles E. Doty, Cleveland, Chairman

To the President and Members of the National Association of Building Owners and Managers:

The work of the Insurance Committee for the year just ending did not follow a program laid down by it at the first of the year. It merely endeavored to continue the policies as formulated by previous committees and adopted in due form by the association itself. During the years that this work has been going on, the association has been growing in numbers, and many of the present membership are, therefore, unfamiliar with the processes leading up to the situation as it exists at the present moment. For that reason, in presenting this report, we thought it advisable to give you, as briefly as possible, a resume of the work of the Insurance Committee since its inception.

The first committee was appointed twelve years ago, in 1910, and consisted of the late Cullen Brown of Detroit, Geo. T. Mortimer of New York, T. E. Bainbridge of Chicago; J. T. Curran of Seattle and the present chairman. The sentiment expressed in the discussion in the Washington Convention, which authorized this Committee, was that fire insurance rates on office buildings were too high, and the committee was instructed to negotiate with the insurance companies for lower rates.

The committee was cognizant of the fact that up until the time of the skyscraper, the down-town sections of all cities were extra hazardous as regards to fires, but that a certain amount of the risk had been reduced by the displacement of some of the old buildings by the newer type of office and commercial buildings and which, in many places, had already proven barriers to otherwise very menacing fires.

The committee, having no data at hand, sent out a questionnaire to owners and managers in all parts of the country. One hundred and seventy buildings reported showing a loss ratio of about 10 to 11 per cent.* (Similar questionnaires were sent out on two later occasions with similar results.) A sub-committee, consisting of Messrs. Brown, Bainbridge and Doty, presented this data to Mr. J. V. Parker, manager of the Western Actuarial Bureau, as one point in evidence for a reduction in rates. Mr. Parker argued, and possibly correctly, too, that no data could be of any value unless it covered every building in the class and for a period of not less than ten years — twenty years would be better. Mr. Parker has just completed a new schedule for office buildings and very

*1914	60 buildings	Loss ratio	3.83%.
1918	238 buildings	Loss ratio	10% to 11%.

kindly gave us a resume of test applications of the same, in time to report to the convention immediately following.

No insurance committee, since then, has ever relaxed from a determination to secure lower rates for office buildings, but it remained for the 1916-1917 committee to employ a representative who visited practically all of the local associations in the endeavor to interest them in this particular work. If no further good was accomplished, it was evident everywhere that, as a result of his visitations, greater attention than ever before was focused in every city visited on the subject of fire insurance. One member alone says that, as a result of the agitation of the subject at that particular time, his building started a saving of \$1,200.00 per annum in fire insurance premiums.

During many of these years, conferences were held by representatives of the association with insurance men of all kinds and standing, including the presidents of some of the large companies. Large brokers in many cities interested themselves in our cause, but none was able to accomplish anything more than we were ourselves.

Although we felt certain that rates were then, and are now, too high, we always conceded that any fire insurance company writing office building risks—or any other class of risks—is entitled to a rate high enough to pay its losses, a fair amount for expenses for operating the company, to set aside a certain percentage for surplus (or conflagration contingency) and to pay a fair rate of return on its stock. Even when we succeeded in convincing our hearers of our sincerity, which we usually did, the insurance companies never gave us any data, because they claimed they had never tabulated any information covering our risk as a class.

After eight years of investigation on our part and negotiations with stock company representatives, the last two years of the eight being very strenuous at times, and neither rate reductions nor figures on which to discuss proper rates were forthcoming from the Stock Companies, this association was in a splendid position to entertain a tentative proposition made to it by Mr. James S. Kemper at the convention held in Chicago in June, 1918. Mr. Kemper offered the services of eight mutual fire insurance companies to write not over \$200,000.00 on any one office building. Upon further and complete investigation a contract was duly entered with Mr. Kemper, the possible profits in which were enumerated in a circular sent to the membership at that time and from which we quote as follows:

“The perfecting of a satisfactory arrangement with established mutual fire insurance corporations

of proven financial strength and character will enable us:

FIRST: To secure protection as good or better than that now furnished us by stock insurance companies.

SECOND: To eliminate unnecessary overhead in the way of agents' commissions and stockholders' profits.

THIRD: To relieve ourselves of the tax we are now paying on undesirable risks accepted by the stock companies.

FOURTH: To get the benefit of the reduced cost which has resulted from the inspection and fire prevention work of the successful mutual companies.

FIFTH: To obtain definite information as to the actual cost of fire insurance on our class of business."

While every one of the first four items is desirable, the first being absolutely essential, yet the fifth item gave to us that for which we had been long contending with the stock companies, i. e., data at all times pertaining to the actual cost of insurance on our class of risk. With this information in hand, and assuming that it is favorable to our class, we would—or will—be able to negotiate on an equal or better basis with the stock companies or enlarge our operations with the stock companies.

On the other hand, if the data which is secured on business written through the mutual office does not show that we are entitled to reductions in rates, we will have secured the data for which we have always contended and we will have to be satisfied that the rates charged by the stock companies are, in the main, probably correct.

However, in the meanwhile, those who are insuring in the companies comprising the Building Owners' Federation of Mutual Fire Insurance Companies (the eight companies writing fire insurance on office buildings) have been enjoying dividends amounting to 25 per cent on their premiums, a very satisfactory return in itself and something for which the stock companies will have trouble in finding a substitute.

Stock company premiums are usually paid for three and five years in advance. Premiums to our mutuals are paid annually. This involves a smaller premium investment which, together with dividends and interest on the amount saved each year, makes a total saving of 36.5 per cent, figured on a three-year premium and 40.3 per cent, figured on a five-year premium. In order that there be no mystery attached to this statement, the following figures are submitted, based on \$200,000 of insurance.

BUILDING OWNERS COMPARATIVE FIGURES WITH STOCK COMPANIES
USING \$200,000 INSURANCE AT A BOARD RATE
OF 20C PER ANNUM

THREE-YEAR BASIS

Stock companies premium.....	\$1,000.00
Building Owners premium—	
1st year	\$320.00
2nd year	240.00
3rd year	240.00
Total premium paid.....	800.00
Less dividend due at end of 3 years.....	80.00
Net cost	720.00
Saving in premium.....	\$ 280.00

Six per cent compound interest in premiums paid
stock companies in advance and savings in premiums.

1st year	\$ 40.80
2nd year	28.85
3rd year	16.18
Total amount of interest.....	\$ 85.83
Savings in premiums.....	280.00
Total amount saved.....	\$ 365.83
	(36.5%)

BUILDING OWNERS COMPARATIVE FIGURES WITH STOCK COMPANIES
USING \$200,000 INSURANCE AT A BOARD RATE
OF 20C PER ANNUM

FIVE-YEAR BASIS

Stock companies premium (four times)....	\$1,600.00
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Building Owners premium—

1st year	\$320.00
2nd year	240.00
3rd year	240.00
4th year	240.00
5th year	240.00

Total premium paid.....	1,280.00
Less dividend at end of 5 years.....	80.00

Net cost	1,200.00
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Savings in premium.....	\$ 400.00
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Six per cent compound interest on premium paid in
advance and on savings.

1st year	\$ 70.80
2nd year	60.65
3rd year	49.89
4th year	38.48
5th year	26.37

Total amount of interest.....	\$ 246.19
Savings on premium.....	400.00

Total amount saved.....	\$ 646.19 (40.3%)
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Up to January 1, 1922, the Building Owners Federation of Mutual Fire Insurance Companies had functioned only in a limited manner, its principal support coming from the Cities of Chicago, Cleveland and Detroit, with a smaller amount of lines written on buildings in cities scattered around the country. The experience gained on business written up to this time (1-1-22), (the first policy having been written less than three and one-half years previous), showed a burning ratio of .0563 and a loss ratio of 16.22. If these percentages had been maintained on policies on 2,500 or 3,000 office buildings in the country, it would have clearly indicated that the present rates are too high.

It clearly demonstrated to Mr. Kemper, however, that our business is extremely desirable, as a class, and, as a result, he sent out on March 28th the first of a series of circular letters, the second going May 18th, and others will follow at definite intervals. Mr. Kemper states that never in the history of their office have they ever received such a favorable response as they have to the two letters recently sent out. The ultimate success of this effort now seems assured and the reports that will be given out from time to time will have a tremendous bearing on the rates that we will have to pay in future years for fire insurance.

One member of our Committee, who is opposed to mutual insurance, maintains that the connection between our association and the Building Owners Federation of Mutual Fire Insurance Companies is not clearly defined and for that (or for other reasons) argues that the association may become unnecessarily involved because of unwarranted activities of the committee or possibly of its Chairman. The individual members of the association are in no way compelled to take out policies in the mutual companies, but even a policy for \$25,000 or \$50,000 will permit the other members to incorporate the fire insurance history on that property with an increasingly large number of other properties and in a short time we will have history that will be worth millions of dollars to owners of down-town properties if the aggregate is taken into consideration.

It was suggested by some one that we have a debate at this convention entitled "Stock Company vs. Mutual Company Insurance." Your Chairman did not agree that that was a proper subject to debate and voted against the plan. The subject is, and always has been, "what is the proper rate to charge office buildings for fire insurance." The stock companies repeatedly said they could not furnish this information, so in 1918, when a certain group of mutual companies said that they would endeavor to supply this information, we naturally formed an alliance with them. That we were wise in the selection of the proper mutual

companies is partly evidenced by their* growth in the past four years, or since they were first selected by us.

Still another member of the association wanted us to place on the program a representative of the stock companies to tell how rates are made and to present, from their standpoint, data which has been compiled on our class of risks from the year 1917. At first blush, we may not appear consistent when we decline to accept this information from the stock companies when we have always contended that this information must be the basis of negotiations with them.

Within the past three weeks, representatives of the stock companies asked permission to present to us the result of data acquired from 1917, since which time, they say, they have been keeping a record of premiums, losses, etc., on buildings of our class. They stipulated, however, that the figures could only be presented to us by a representative designated by them. When in 1918, we made our arrangement with Mr. Kemper, the opportunity to acquire this information was the principal consideration. As suggested earlier in this report, we have always expected to negotiate further with the stock companies, but not until we were amply fortified with a sufficient amount of data to make our position secure. We have not yet acquired that amount of data through the mutual companies and probably will not for another two or three years. In our judgment, it would have been unwise to have allowed this data on rates, premiums and losses to be presented to the membership, as a whole, without first having taken them up for due deliberation by the executive and insurance committees. This matter is of vital importance and should be considered at the earliest possible moment by the incoming committees.

The matter of rate reductions need not wait entirely on the competition of the mutuals or on the voluntary offerings of either the stock companies or the mutuals, if the experience of one of our associations is a guide.

Five or six years ago, the members of the Chicago association gathered statistics on all of the buildings of their class in their city over a period of several years. So complete and accurate was this data, and also favorable to their properties, that they were able to convince their local insurance authorities of the justice of their claims and secured reductions in rates which

<i>*Name of Company</i>	<i>Cash Assets</i>	<i>Cash Assets</i>
	<i>Jan. 1, 1918</i>	<i>Jan. 1, 1922</i>
Central Manufacturers, Van Wert, O.....	\$1,077,461	\$2,229,350
Lumberman's Mutual, Mansfield, O.....	1 091,860	1,810,429
Millers' Mutual, Alton, Ill.....	894,085	1,379,063
Millers' Mutual, Ft. Worth, Tex.....	458,467	673,536
Mill Owners' Mutual, Des Moines, Ia.....	746,732	1,703,289
Northwestern Mutual, Seattle.....	722,768	1,959,892
Pawtucket Mutual, Pawtucket, R. I.....	644,385	960,557
Pennsylvania Millers' Mutual, Wilkesbarre, Pa.....	716,138	1,470,692

gave them a saving of about \$20,000 a year on all of their member properties. So satisfactory was their effort at that time, that they are now bringing their records down to date and will present them again to the insurance companies in a very short time.

Your committee feels that this is an effort that will produce results anywhere and, as a result, we sent out this past week a specially prepared form, requesting each association to gather full and accurate data as suggested by the form and when 100 per cent of the buildings in the city have reported, to present the data before the local insurance authorities with a view of obtaining lower rates.

If the work is undertaken in a one hundred per cent manner and by practically all of the associations, the data will be of inestimable value to the National Association. It is, therefore, requested that each building furnish its information in duplicate and that they be sent into the National Secretary's office at Chicago where they will be tabulated and kept for further use.

It is also requested that these figures be kept so that you can add to them from year to year, thereby always having accurate data on premium income and losses, up to within twelve or fifteen months of any given period.

The form prepared has been simplified as much as possible and has been edited by the office of A. M. Best & Company. This company will also supervise the tabulation of all data filed and will assist further from time to time as requested by the association.

We trust that the members in every city will see the possibilities offered by this data sheet and will make a successful effort to secure the information and to present it in an effective manner to the proper insurance authorities.

(See Form on Page 268.)

Probably the event of greatest recent events in which we are interested, was the fire loss to the Burlington office building in Chicago. Very few of the members of this committee saw the building during the fire, or since, and any detailed reference to it should, therefore, be left to others who have first-hand knowledge.

It proved, however, that no matter how much attention was called to the greatly increased replacement value that was accruing to office buildings, a large number of owners and managers throughout the country, especially those using co-insurance clauses, neglected, and are probably neglecting today, to increase their lines of insurance to proper levels. In a bulletin issued about the Burlington building fire by a large insurance brokerage concern it says: "The C. B. & Q. building stands as a monument to fire-resistive construction. It is structurally sound, and it probably saved the entire manufacturing district to the west from destruction by the conflagration."

REPORT ON FIRE INSURANCE AND LOSSES

City _____

Building _____

Construction—Fire Resistive () Ordinary () Height in Stories _____ Year completed _____
(Check) (Check)

Stairways, Open or Enclosed _____ Elevators, Open or Enclosed _____ Present Value of Bldg. \$ _____

1	2	3	4	5	6
Calendar Year	Total Fire Insurance in Force December 31 on Building Structure	Total Premiums Paid during Calendar Year (a)	Rate per \$100. of Insurance (b)	Total Losses Recovered from Insurance Companies	Losses Incurred—not recovered from Insurance Companies
1910					
1911					
1912					
1913					
1914					
1915					
1916					
1917					
1918					
1919					
1920					
1921					

DETAIL OF FIRE LOSSES

DATE	AMOUNT (To check with totals of column 5 and 6 of table above)	CAUSE OF FIRE (Supposed source, and its Location—what part of what floor)	CHARACTER OF LOSS (How many floors involved? What structural parts destroyed? What damaged?)

Add any pertinent remarks on back of this questionnaire.

Printed June 1922—National Association of Building Owners and Managers

- NOTE:— (a) In giving premiums paid, put them down in the years in which the payments were actually made; and *after* the amount put "(1)" if one year policies; "(3)" if three years, "(5)" if five years.
- (b) Indicate if 1 year—3 year or 5 year rate.
- (c) Give difference between actual amount of losses and insurance collected. Explain on back whether this was due application of co-insurance, lack of insurance, failure to make claim or what.

Date _____

Manager _____

There is no one factor that has done as much to reduce and almost entirely eliminate conflagrations in the congested downtown sections of the cities as has the modern office building. After it, came the modern hotel and mercantile buildings, all of which usually displaced old fire traps; and then came high-pressure systems and motor-equipped fire departments with their many improvements for fighting big fires. Conflagrations do not start in office buildings. Frequently they stop fires. It was suggested in the circular just referred to that the Burlington building probably saved the destruction of a manufacturing district to its west

which would have been even more costly to the insurance companies.

Your chairman has repeatedly suggested that for this reason the insurance companies, in some manner, should subsidize our class of risks. Either they should refuse to insure the exposing risks, or else they should give our class the credit for fire resistance and not add any penalty for exposure hazards.

The work of "Fire Prevention" has been conducted under the supervision of Mr. Q. A. Woodruff, Vice-Chairman, who will report to you on that phase of our activities.

Respectfully submitted,

Chas E. Doty, Chairman,
Cleveland.

Thos. P. Danahey, Detroit.

R. H. Peters, Dayton.

Clay H. Thomas, Omaha.

O. A. Woodruff, New York.

R. P. Ballard, Seattle.

Shirley C. Ward, Los Angeles.

Gordon Strong, Chicago.

E. M. Horine, Atlanta.

M. C. Banfield, Portland.

J. H. Palmer, Minneapolis.

John Kesselring, Louisville.

Max S. Schayer, Denver.

F. C. Tucker, Indianapolis.

NOTE.—Approval has not been received from the following members of the committee: A. W. Warner, New York; John Lewis, Cincinnati; G. Murray Seal, Baltimore; Earl Pooler, San Francisco.

I will be glad to answer any questions you have in mind with reference to the subject-matter in the report. (Applause.)

MR. DOTY: I referred in the report to the resolution approving the agreement made with Mr. Kemper at the Chicago convention. The agreement is in the 1918 convention proceedings, a copy of which you have.

Reference is also made to the circular sent out by the Committee following the approval of the contract with Mr. Kemper's office. This reads:

"The perfecting of a satisfactory arrangement with established mutual fire insurance corporations of proven financial strength and character will enable us

"First: To secure protection as good or better than that now furnished us by stock fire insurance companies.

"Second: To eliminate unnecessary overhead in the way of agents' commissions and stockholders' profits.

"Third: To relieve ourselves of the tax we are now paying on undesirable risks accepted by the stock companies.

"Fourth: To get the benefit of the reduced cost which has resulted from the inspection of fire prevention work of the successful mutual companies.

"Fifth: To obtain definite information as to the actual cost of fire insurance on our class of business."

That concisely presents the results we hope to obtain by our contract with Mr. Kemper.

THE PRESIDENT: I am a great believer if a man is enthusiastic in any subject, to continue him in the work of that particular subject. Mr. Doty, both during his term as President of this organization and since, has been enthusiastic on the matter of Insurance. I felt justified in appointing him Chairman of the Insurance Committee, which Committee is made up of sixteen men located throughout the country.

I do not know whether this is a unanimous report of this Committee or a majority report or is the make-up of our Chairman on account of the distance separating these committeemen making it impossible for them to function as a unit.

MR. DOTY: This report was not put in final form until Saturday and was mailed to all of the members of the Committee. At that time evidently they practically all received it, for I have received either a letter or telegram from more than a majority of the members, all of whom have approved the Committee report. The names of those approving will be filed, and if any dissent, their names will be filed too.

THE PRESIDENT: A great many new members have been admitted to this Association since the approval of the contract with Mr. Kemper. In the report Mr. Doty names the companies with which we are associated. I will ask Mr. Doty to explain this portion of the report.

MR. DOTY: These companies have offered their services to write insurance on office buildings. With them it was an experiment, not necessarily with us, because they are good, strong companies. In addition to the dividends which they pay—they have always paid dividends—it offered an opportunity to these companies to work out an arrangement not only with the members of our Association, but with owners of all office buildings in the United States, so that data on losses, etc., from office buildings could be secured for the benefit of the National Association. There is no connection between the Association and the companies themselves.

THE PRESIDENT: Then the explanation means only that this Association is in no way associated for profit with these companies, and it is only the association that may exist between you as an individual and these companies, if you should desire? Is that correct?

MR. DOTY: Individually, yes. If we can get a sufficient number of owners of property interested to the extent of placing insurance, and the data which we obtain is favorable, it is an association for profit for all of us. There is no doubt it will mean a reduction in insurance rates.

THE PRESIDENT: I am trying to segregate this Association from this group of insurance people. I have a telegram from a

member of this Committee—a New York man. He is trying to warn me to bring to your attention that in the event of the financial failure of this group of companies, or any one of the group, there might be a moral, and possibly a financial obligation on this Association.

I think Mr. Warner has conscientiously and continuously been more or less of a dissenting member from the mutual insurance idea of this Association. I purposely put him on that Committee. He has always expressed himself as believing in stock company insurance. I thought if we had an Insurance Committee, that Committee would be the stronger if it were composed partly of stock company advocates so that the whole subject could be carefully thrashed out and the final result spread on the table for your acceptance or rejection.

Mr. Warner's telegram reads as follows:

The Nat'l Ass'n of Bldg. Owners & Managers:

Supplementing the proposed report by the Insurance Committee Chairman, I submit that by appropriate resolution the Association shall state that while the insurance authorized by the mutual companies comprising the so-called Building Owners Federation of Mutual Fire Insurance Companies is believed to be safe, the National Association has no special knowledge with respect thereto; that it guarantees no statement or fact with respect to such insurance by or in behalf of any of the said companies, and assumes no responsibility therefor; and that it is expected that members interested in such insurance will intelligently investigate the insurance and the companies on their merits.

A. W. WARNER.

THE PRESIDENT: Are there any questions or remarks on this report?

COLONEL GORDON STRONG, Chicago: I presume you all remember the Chicago fire, and you all remember it was not called the Milwaukee fire for one very good reason: Chicago burned and Milwaukee did not. Mr. Doty refers to the fire in Chicago as the "Burlington fire." The Burlington building was the only thing that did not burn. There are several very important lessons to be learned by the West Side fire which the Burlington Building prevented from being a general conflagration in Chicago. The entire fire department of Chicago was called on that fire, and it would have gone forward block by block except for that splendid monument of fireproof construction which has been rapped by every insurance company ever since! That is a slight criticism, Mr. Doty, of your report which refers to that as the "Burlington fire." Otherwise it is all right.

As to the matter of the mutual companies, if Mr. Warner's resolution can be conceived in a positive, rather than negative tone, and suggest that this Association is heartily in sympathy with the object of collecting insurance data and opposed to the custom of

the stock insurance companies of concealing their data, and for that reason advocates the placing of insurance in the companies of Mr. Kemper, then I should be in favor of the resolution of Mr. Warner.

Although I recognized the value of having this data collected by the mutuals, yet before placing any mutual insurance I inquired of the Alfred M. Best Co., the Dun and Bradstreet of the insurance world, as to what was the standing of mutual companies. They reported favorably and I was told they regarded no companies in the United States higher than that group of companies represented by Mr. Kemper. So I propose to carry an increased amount of insurance with them, and I think others who investigate will do the same thing. (Applause.)

THE PRESIDENT: I take it the silence as to the collection of data as suggested by Mr. Warner's telegram is approval of that part of the report.

There is one little point to emphasize, and that is that this Association at large is not responsible for the financial standing of these companies as mentioned in the report, and that the individuals shall make their own investigation and stand on the responsibility therefor.

FRED SWETLAND, Cleveland: I did not get the same slant our President did to that telegram. Knowing Mr. Warner's predilection to stock insurance as against mutual, and his skepticism as to the value of this Association's having any association whatever with mutual insurance companies, it struck me he was attempting to throw a monkey-wrench into the gears rather than to protect the Association, and I object to that sort of procedure. If he wants to throw a monkey-wrench and thinks stock insurance better than mutual insurance, he should come out and say so.

I want to give you a little history of the insurance which the Swetland Company placed on four of the Company's buildings. You know what I think of the National Association, and I am thinking always in comparison. The National Association, in my opinion, has performed a tremendous service to its members and the business property of the country at large. One of the things it has done for the Swetland properties is that on the small amount of insurance we were able to place through the restrictive provisions in our arrangement with this Building Owners Federation of Mutual Fire Insurance Companies, has saved the Swetland Company on a comparative basis with the best stock companies the sum of \$1,637.35 in three years. Now, at the rate of ten dollars a year, that will pay the Swetland Company's membership fees in the National Association for a good many years to come. I do not say that is all we should contribute; but, under the present provision, that is all we can contribute.

It seems to me if the members of the National Association should seek to buy their insurance from the Building Owners

Federation of Mutual Fire Insurance Companies as far as they are able to do so, they will buy not only as good protection as the leading stock companies can give, but the added protection of the mutual companies due to their form of organization, and a saving of \$1,637.35 for the same kind of insurance. (Applause.)

THE PRESIDENT: We have a great advantage here for the reason all of the evidence goes into the record, and no objection on any attorney's part can keep it out. Therefore they are in the record in favor of mutual insurance. Is there anybody here who wants to talk on the other kind of insurance? This is our party, and if you want to remain silent you have no kick coming later.

MR. APPLEGARTH: Has your Committee taken up the question of the present requirements of insurance companies regarding the amount of insurance carried in order to get a reasonable rate? The experience of the San Francisco fire shows conclusively the greatest loss you can get to a Class A building is 50 per cent, yet you are obliged to carry 90 per cent. If you want to carry less than that on a flat rate, you must pay a much greater premium; so we shall have to take our rate to 90 per cent insurance. Suppose your building is valued at \$100,000. You think you are going to get \$90,000, but you never can. The insurance company is not risking \$90,000—only \$45,000—but they are charging on \$90,000. Has Mr. Doty's Committee considered that angle?

MR. DOTY: We have not. The matter is progressing along the line of finding what is premium income and the average rate to produce that premium income; and what are the losses, and how much is left over for expenses, and how much remains and should be returned to the policyholders in the way of a reduction in rates? That is what we are aiming at now.

Mr. Warner, as Mr. Swetland has suggested, has from time to time interposed a good many objections to mutual insurance and to our arrangement with Mr. Kemper's office. If he has been satisfied on the other points he has raised and brings up this one question only, I think Mr. Strong's suggestion, if placed in the form of a resolution approving the report of the Committee, might amply satisfy him, and would be satisfactory to any other member of the Committee so far as I know.

Mr. Kemper has come on from Chicago to be present at this session. If there are any questions the members would like to ask him during the session, or later, I know he would be glad to answer them; and inasmuch as he is here, I think the courtesy of the floor should be extended him if he cares to avail himself of the opportunity to address us. I make that request.

THE PRESIDENT: Mr. Doty has made the request. I assume it is your wish. Unless I hear to the contrary, I will extend the privileges of the floor to Mr. Kemper. (Applause.)

JAMES S. KEMPER, Chicago: I did not come down prepared to make a talk of any kind whatsoever. I did come with the thought some of you who have already taken our insurance might want to know something of it, and that there might be some of you here who had in your minds some questions about this or that feature which I could answer.

I can only say to you for our organization that I am glad to renew to you the pledge which I made originally when we went into the matter; that we would work with you unselfishly to accomplish the end we were trying to accomplish—the securing of accurate data on the burning cost of this particular class of business. We have not made any effort to write a great amount of insurance, and I do not propose to do so at this time. We would rather have three \$50,000 policies on three buildings than \$2,000,000 on one building. We are not seeking a lot of premium income. We want as wide a representation as we can get of the different classes of office buildings so that we can determine the burning ratio.

We have been in the mutual company business for a great many years. We have built up in some classes as high as 80 per cent. We got into this work because we were requested to do so by your Insurance Committee, after they had investigated a number of other sources which had not produced the results hoped for. There is no one in our organization who gets a commission out of any insurance written for you.

The time will probably never come, if we had all the business we could get from all the building owners in the United States, it would represent over 5 or 10 per cent of the income of our office; but that fact does not change our attitude nor our attempt to be helpful to you in any way we can.

I am sorry Mr. Warner could not be here, because I should like to explain to him our position regarding the individual companies.

In the history of insurance in this country, a mutual fire insurance company which has accumulated \$100,000 in cash surplus has never failed, never retired, and never made an assessment. Every such company organized since the Philadelphia Contributionship came into existence in 1752, is still in business, with two exceptions, both of which were reorganized as stock companies, the one failing and the other reinsuring. Our companies have assets and surplus far in excess of that figure. Their permanence cannot be questioned.

We are equipped to go on with you if you want us to in working out this problem. After you get your information, you can decide whether it is better to go on with mutual insurance with a group like ours, or whether it might be better to have your own mutual or stock company; or perhaps you can get rates from the stock companies below the actual carrying cost. But you cannot

do anything until you get the information, and that is what we are trying to help you do. I want you to feel free. We would be delighted to answer any question on any phase of our insurance, whether it originates from a policyholder or prospective policyholder or any member in your organization who might be asking for curiosity. The door is wide open and we will be glad to have you step in. I thank you. (Applause.)

ALFRED C. KENNEDY, Omaha: I would like to ask what proportion the underwriting policy of your Company is as applied to a conflagration hazard in any city? Are you careful to write just so much in any one locality, so that it will not reach any large proportion of your assets at one time?

MR. KEMPER: We have never accepted any business of any kind or character in conflagration districts until we made this particular arrangement. It has been our policy for many years not to accept any kind of a risk in a conflagration district. We do now accept these fireproof office buildings. The latest information I have available on the liability being written and the amount accepted by the leading American companies writing in New York City, showed the five companies writing the most business were operating in the district between Fourteenth Street and the Battery, and accepting ten times their assets. You building people may convince us we can take larger amounts, but at present we are satisfied to keep our limits down to from \$50,000 to \$200,000, and a few individual cases with somewhat larger amounts. We are very careful on that point.

MR. KENNEDY: I should like to ask in regard to the 90 per cent co-insurance clause. Maybe you can answer Mr. Applegarth's question in regard to rates on it?

MR. KEMPER: The rate for 90 per cent co-insurance clause on a fireproof building is very much greater than on a non-fireproof building. Take this hotel building. The rate for 90 per cent co-insurance clause is 10 per cent. It is a question whether it is not 10 per cent too much, because if a fire started, it would go. The rate varies in different localities. It will average around 40 per cent, so that a man whose rate would normally be fifty cents would get a thirty-cent rate.

From an actuarial standpoint, there is only one question that is important, whether a fireproof office building or what not. How much are the premiums and how much are the losses? It is true on a fireproof office building the probable maximum loss is less than on other classes. That is true with some of our sprinkler risks not fireproof. But so far as the rate-making is concerned, there is just one important factor and that is, How much are the premiums and how much the losses?

E. M. HORINE, Atlanta: I move the Insurance Committee report be accepted and placed on file.

The motion was seconded by Mr. Johnstone, and carried.

Report of Committee on Fire Prevention

Oscar A. Woodruff, New York City

The subject of Fire Prevention is a very wide one and there are many different viewpoints on the subject. I think there is only one view on the subject of fire losses, and that is, we are agreed, they are far too heavy. Reads:

I wish I knew just exactly what you expect from me today on the subject of Fire Losses and Fire Prevention. If a lot of flowery phrases, I am sure you will be disappointed. If you expect me to reduce your fire losses, I am fearful you will also be disappointed unless, perchance, you are willing to co-operate in certain matters which seem necessary to prevent the ever-increasing number of fires. Theories and advice are sometimes good enough if paid attention to; but if allowed to go in one ear and out the other, it seems almost useless to take up your valuable time in suggesting them. We ought, I think, to understand pretty thoroughly by this time that the methods we have been pursuing to prevent fire losses are inadequate; that they do not in fact even approach the point of being efficient, all of which is easily proven by the figures that come before us from month to month, and from year to year.

Persistently and continuously we are showing increased fire losses, even in the face of much publicity; higher education and the splendid efforts being made by the National Fire Protection Association and others to bring about a reform. In other words, as I see it, our present day methods are *hopelessly* inadequate. We are spending time, energy and money to no good purpose. There is no denying the fact that in some cities, fire prevention activities have increased tremendously during the last few years and with very good results. In other cities, people are just as careless as ever and fire waste goes on, increasing rather than decreasing.

In some buildings, owned or managed, or both, by the members of this Association, I know how true it is that within the last two years, fire prevention activities have been more diligently pursued than ever before, and yet, with all our education, our full realization of the dangers from fires, and the efforts put forth by some people and some organizations to prevent them, our losses are steadily mounting, and each month the figures for the United States and Canada appall me. I am forced to the conclusion that the only way we are going to reduce these losses is by the enactment of certain ordinances and laws, providing for severe penalties and punishment for those who through carelessness or neglect, are the direct cause of fires.

The mere enactment of these ordinances and laws, however, will not be sufficient. The second step is to see to it that they are enforced. In all classes of buildings, from day to day, I see evidences of worse than carelessness in the matter of fire hazards. These are not only hazards for the building in which the evidence is seen, but a hazard for all adjoining property and this is one of the vitally important things that should be corrected.

In most of our large cities, Fire Prevention Bureaus are maintained and inspections are made, and violations reported; but it seems to be true that these inspections are few and far between, and that during the interval between inspections, awful fire hazards are maintained. If these inspections could be made more frequently, it would certainly help. Another great help would be the reporting to the proper authorities of the fire hazards we encounter daily. In this particular, let me say that just at the moment I am reporting a fire hazard I discovered in an adjoining city only very recently, while inspecting a building. All of us see these fire hazards practically every day, and pass them out of our minds with the simple thought: "My, what an awful fire hazard." If we did our duty to ourselves and our fellowmen, we would report them to the proper authorities, and have them corrected.

There should be some penalty imposed upon those who are *continually* ordered to remove fire hazards. In other words, I believe the proper authorities should keep a record of such cases and make the punishment for repeated offenses severe enough to stop them. None of us, I believe, have any sympathy whatsoever for the person who is warned of a fire hazard and fails to remove it promptly. Many buildings have violations filed against them on account of fire hazards, but neglect to remove them. *All* these people should get a short shift with the authorities. If, after a property owner or agent has been notified, anything happens before the hazards are removed, I believe the owner should be held responsible for any damage done his neighbor's property and for any and all expense incurred by the fire department in putting out the fire. Further, I believe property owners should be held responsible for damage to neighbor's property if it can be proven that a fire was caused through carelessness or neglect. This is the case in some foreign countries, and while it may seem drastic to some of you, to my notion, it is the best and only way to cure the evil.

Those who take precautions to prevent fires, will not suffer by the enactment of such laws. Those who are careless and negligent, will and *should* suffer. Do you realize that the best authorities make the claim that from 60 per cent to 80 per cent of *all* fires are caused by either carelessness or neglect? Such being the fact (as it certainly is) why should not the guilty be punished?

Many of you will be surprised, I believe, to learn how much money is spent by some individual buildings, each year, to prevent

fires even in fireproof buildings where there is certainly less chance for fires than in other classes of buildings. I have often wondered why it is that fireproof buildings are seemingly more careful about fires than other buildings. A visit to our fireproof buildings will show, in the majority of cases, a very elaborate fire equipment. If you investigate a little deeper, you will probably find an organized fire department.

Compare this condition with the semi-fireproof or non-fireproof buildings, and you find very meager fire equipment and no organization to fight fires. The answer, it seems to me, is very simple. We cannot expect any help in fire prevention matters from certain classes of people—the shiftless, the ignorant, etc. I do feel that we *can* get some sort of a hold on these classes through fear of the authorities and I doubt if we can get it in any other way.

Then we have another class to contend with, perhaps equally as dangerous; the class that loads up with insurance and says: "I should worry!" If these people were held responsible for losses to others, and for expenses incurred in extinguishing fires, the probabilities are they would look at fire prevention more seriously.

It seems to me it would be the height of folly for me to even attempt any remarks about construction to prevent fire hazards, as applied to buildings such as are represented by the members of this Association. In the first place, I think it can be taken for granted that we either know what to do without being told or else, know how and where to find out. In the second place, there is numbered among our speakers Mr. Ira H. Woolson, Consulting Engineer, of New York and I anticipate his telling us a lot of things we never dreamed of in connection with "Some of the Common Faults in the Construction of Office and Apartment House Buildings, as regards Fire Hazards and Their Correction."

On the subject of construction, however, as applied to business buildings and apartments, I hope I may be pardoned for expressing the opinion that a very important part of the construction plan of new buildings, is the early assistance and co-operation of some one who knows how. This may be the Building Manager or it may be a competent engineer. The same thing applies to equipment after construction, and it is in my judgment nothing short of foolhardy to attempt the building and equipment of business buildings, without the co-operation of fire prevention engineers and specialists who know their job. The problem after construction, and after the installation of adequate equipment, is plainly up to the Building Manager.

It is not my intention to burden you with a lot of figures, but I must use a few to drive home, with added force, the seriousness of the situation as to fire losses. It should impress upon your minds the very certain need for more general and more certain

precautions to prevent fires. It is well to remember that all fires are about the same size when they start, and that the damage any one of them will do, cannot be foretold.

For instance, the careless flicking of a match recently caused a fire loss of half a million dollars, destroying three blocks of houses and rendered two hundred families destitute and homeless.

Another very recent occurrence was the careless disposal of a lighted cigarette, causing a fire loss of two million dollars, destroying block after block of buildings, and put hundreds of families in the streets. These fires were the same size when they started, and both resulted in terrible losses and brought hardships on scores of families.

Note the *almost* steady increase in annual losses over a period of five years:

1917	\$267,273,140
1918	317,014,385
1919	269,000,775
1920	330,855,625
1921	332,654,950

Last year marked the heaviest loss in our history with the exception of 1906—the year of the San Francisco calamity—about \$460,000,000.

Again for the first five months of this year, observe the increase in fire losses over the corresponding period last year:

Total January to May, inclusive, 1921.....	\$135,925,600
Total January to May, inclusive, 1922.....	168,756,750
Increased losses for five months.....	32,831,150
Increased percentage—Approximately 20 per cent.	

Note, too, that last year's figures were made up from lower stock prices than for the three or four years preceding. This also applies to the first five months of this year. Had all figures been made on the same schedule, the per cent of increased losses would have been much greater.

Generally speaking, I am rather loath to offer suggestions relating to fire prevention. In my subconscious mind, there is ever present my own building, where every possible precaution is taken every hour of every day to prevent fires. I somehow cherish the hope that *all* buildings are just as much on the alert.

I venture to say that all Class A buildings *should* be and that, at least, some Class B and C buildings and loft buildings *could* be far more particular than they are. One thing that *could* be done and *should* be done is systematic and *recorded* inspections for fire hazards. I say "*recorded*" inspection because a record will show if the same employee or same tenant is repeatedly found negligent and careless. I believe these fire inspections should be just as much a part of the operating of a building as keeping coal in the

bunkers and just as faithfully followed up as sending out the bills for rental.

And there should be systematic and recorded inspections of equipment too. Fire Marshall Elliott of Philadelphia made a point of this in an article of his, recently published in *Building and Building Management*. I hope you all read it—it contained many admirable points and much valuable information. What better evidence of gross carelessness and neglect can be found than in an emergency to pull down an extinguisher and find it dead or have hose burst the moment the pressure is put on, or learn too late that fire doors will not operate, or that a valve won't work? Yet all these things are continually happening, all for the lack of proper inspection.

In some cities combination automatic and mechanical gas shut-off valves are required. A proposed ordinance, recently introduced before the Board of Aldermen in New York City, to compel this installation, was fought by the Building Owners' and Managers' Association and defeated. Nearly everyone is agreed, I think, that these valves should be installed in any building where more than a few people are gathered together. Several buildings in New York, including some business buildings, theatres and institutions, have made the installation at their own expense. I personally believe that these installations will be compulsory in all the large cities with, perhaps, some satisfactory adjustment of the expense, and lowering of insurance rate. We ought to do everything possible to save human lives and remove all the dangers from the pathway of firemen.

You will, perhaps, be interested in hearing about two or three newly approved devices. A new extinguisher has been perfected to be used in exactly the same manner as a revolver. It is loaded the same way with cartridges. This gun is simple enough and small enough to be easily handled. Pulling of the trigger liberates the gas. If one cartridge does not extinguish the fire, simply pull the trigger again, and so on. The gun can be used at any angle, and does away entirely with the physical effort required to operate certain other types of extinguishers. This seems to be a most useful and practical invention.

Another piece of apparatus recently approved by the government for fighting forest fires, is a tiny engine, weighing less than seventy-five pounds, which can be carried on a man's back to a stream or pond, and will discharge twenty gallons of water per minute at ninety pounds pressure.

A patent was recently granted on a device to detect smoldering fires in a building. The patentee recently informed me that a very large number of fires are of the so-called smoldering variety, and continue for several hours before bursting into flame. His

invention is to detect the presence of these fires in the smoldering stage. Briefly, the apparatus consists of cones in the ceiling, connected with pipes leading to a central station and these pipes terminate about one inch from the glass front of a cabinet, properly labeled. There is an outlet in the top of the cabinet for the smoke to escape. The smoke is practically driven out by a fan run by a small motor, the idea being to give the watchman a chance to detect the presence of smoke by the sense of smell. I am unable to tell you at this time of any installations that have been made, but I am simply calling the matter to your attention as a matter of news.

The increasing popularity and hurried installations of radio equipment is causing some concern to many fire prevention experts and fire chiefs. It is claimed that some of the equipments being rushed on the market are of indifferent workmanship, thereby increasing fire hazards. It seems proper therefore to issue a word of warning. Most people do not realize that the storage battery used is fully capable of starting a fire. The practice of recharging these batteries from the lighting current and receiving messages by way of the house lighting circuit, is not regarded with favor. The hazard of crossed wires is always present. In brief: Caution in the selection of equipment and its installation is advocated, followed by an inspection by the underwriting organization. Some policies do not permit of the presence of these fire hazards, at all, without an inspection and such being the case, a policy might easily be voided.

As to just how far Building Owners and Managers are willing to go in the matter of supporting new laws and ordinances (such as were recently introduced in the Massachusetts and Maryland Legislatures and Chicago Council, and failed to become laws and ordinances), remains to be seen. In all these bills, considerable power was given local officials and it was felt, in some quarters, that this power could easily work hardships on the owners of property. In the Massachusetts Legislature, no fight against the bill was offered and, likewise, it was not strongly supported. The Maryland bill, I understand, was not reported out of committee prior to the adjournment of the Legislature. In Chicago, the proposed ordinance was defeated in committee. In neither case do I believe the result justifies the belief that the Legislature bill and city ordinance were without merit. It perhaps is true that they were a trifle radical, possibly a little too severe or elastic, and needed the co-operation of property owners and building managers with legislators and councilmen to frame something thoroughly sane and practical.

I do not believe it is possible for any *one* organization to bring about the enactment of these laws and ordinances. I have the feeling that it can only be done by all factions meeting on a common ground. Everybody realizes the situation and realizes, too, that something must be done to save the terrible waste year

after year. Just what this something is to be, I do not attempt to predict.

In conclusion, permit me to express my thanks for the courtesy and patience you have displayed in listening to this paper. My own belief is that several members of the Association know more about the subject than I do. If during the two years I have been in this work I have helped in any way to arouse a more general interest in fire prevention work, I am amply repaid for all my efforts.

To those of you who have assisted me from time to time in the various matters I have written and talked with you about, I wish to say "I thank you." For my successor in this work, I can only plead for your continued co-operation and help.

And just this parting thought—do not be intolerant of those who are trying to save both fire losses and human lives. Try to feel that your mind is in accord with theirs to the ultimate end, even though you may differ in your ideas as to how it shall be brought about. Freely offer to consult and advise with these people. Together, we can do much; divided, all our efforts are weakened.

And lastly, let us determine for ourselves as individuals, that hereafter we will go a trifle beyond our own doorsteps in our efforts to prevent fires.

Respectfully submitted,

O. A. WOODRUFF,

Vice-Chairman Insurance Committee.

(Applause.)

It was moved that the report be approved and placed on file. The motion was seconded and carried.

Report of Committee on Purchasing

B. H. Belknap, New York City

I want to say the remarks Mr. Class made as to the unanimity of the Committee with regard to his report applies to this one. It was impossible for the Committee to get together to have a meeting. I wrote to all the members, of which there are sixteen, and this report contains the suggestions of a great majority of those who replied to my letters. With regard to the others, I do not know how they feel, because the replies came in so late I did not have time to write again to the other members after getting this report together. (Reads.)

The National Committee on Purchasing of the National Association of Building Owners and Managers was organized at the meeting of the Officers and Directors held in March of this year. The Committee on Purchasing is in that general classification of service committees whose field of work is primarily local. There are several reasons for this situation, varying from geographical to personal.

One of the chief limiting factors of co-operative purchasing on a national scale is the cost of transportation. Because of the extent of territory covered, it would in many cases be unprofitable to purchase and ship commodities from even a centrally located point to all others, even though a lower freight rate might be obtained through combining orders from each city.

Another limiting feature to the success of the national co-operative purchasing is the difference in local requirements and standards. It would be almost impossible to bring about nationally that standardization of materials and supplies necessary before the cooperative purchasing of all building requirements would be profitable. There are, of course, many articles which are exceptions to this limitation and the Committee on Research will render invaluable service in investigating and reporting upon those articles which are either the same all over the country or can readily be made according to specification in various localities.

Again, difficulty will be realized in cooperative purchasing in dealing with the human element. Users of supplies are always more or less favorably disposed toward certain brands of goods. Standardization of articles purchased is obviously the first prerequisite of cooperative buying, and, judging from the difficulty large organizations have in the standardization of equipment and supplies for use of their own employees, the problem would be very serious if attempted on a national scale among the members of a voluntary association.

Cooperative purchasing involves buying in bulk, which is un-

profitable in times of falling prices and impossible for many buildings due to lack of storage space.

There is another feature of National Cooperative Purchasing which should not be overlooked and that is the matter of consumers patronizing the local dealers. It would appear that the real estate business in any city is affected by the growth of the city, volume of general business carried on and prosperity of local industries. Many city boards of trade and similar associations have instituted extensive campaigns urging buyers to favor local merchants and industries. It may be a question whether the monetary saving which building managers might realize through National Cooperative Purchasing would justify abandoning the local dealer in favor of a wholesaler or manufacturer of another city.

From the above considerations, we seem to be justified in drawing the conclusion that National Association Cooperative Purchasing is at least a problem of serious difficulties, the practical solution of which appears a long way off. However, the local association cooperative purchasing is another matter, and there is no reason why this undertaking should not prove practical and profitable.

It was hoped that considerable specific information as to just what was being done in each city by the local purchasing committee could be incorporated in this report, but in spite of earnest solicitation the information collected is not as comprehensive as desired.

Summarizing briefly from the letter of such local committees as have reported conditions are found as noted below:

In Los Angeles the local association has functioned along the lines of cooperative purchasing for some time. They see in collective purchasing a method of destroying local combinations seeking to control prices, and the most effective means to secure fair prices and the best quality. They are saving owners in many cases the cost of experimentation with unknown or misrepresented articles. They have found that the direct shipment method is the best way to buy. On sending out a questionnaire to other cities throughout the country, their secretary found that they were actually buying some supplies manufactured in the East at a lower price than many cities hundreds of miles nearer the manufacturer. It is felt by their committee that "the difficulty has been that we have not been willing to put collective buying to a real test, but have formed judgment through a trial only half supported," and that "the fault does not lie in the principle involved but with lack of proper cooperation."

The local association of Dayton, Ohio, have organized "The Dayton Building Managers Operating Company, Inc.," which has now been in existence about a year and a half. The decreasing prices have interfered with large quantity business and they have

limited the bulk purchases to thirty-day quantities. One of the primary objects of this corporation was the purchase of electric lamps on a blanket contract basis, but this effort has not been successful. Their greatest difficulty has been that since so many men have their own ideas as to the relative quality of various commodities, a proper standardization has not been realized to enable the Purchasing Company to render the service it should.

The Portland Association committee recommends and investigates purchases, which are made by the secretary in the name of the association and billed to it. They find that all janitor supplies, cleansers, toilet supplies and any article which is used in quantity can be purchased through the association, at a marked reduction, and that even on small lots they have secured lower prices since buying collectively. Their secretary sends out a price list at frequent intervals which is now relied upon as their standard.

The Detroit Association Committee advises that "up to the present time the Detroit Association has done practically nothing in regard to the cooperative purchasing plan—in fact, they do not seem to look very favorably upon it."

In Atlanta the local committee experienced some difficulty in lining up the members for cooperative buying of supplies. One trouble was in standardization and another that certain buildings were interested in certain dealers through outside connections. Their secretary has made such purchases as have been arranged for to date. A canvass of the buildings is made and after securing the requisitions, bids are obtained and the dealer delivers to each building, and bills them directly for the amount of their order. No purchases are made through the Association office. The savings of this organization last year amounted to about \$2,000. In addition, a confidential bulletin or price list is sent out weekly quoting the prices of all standard supplies. It has been estimated that this service has resulted in an additional indirect saving to the members of this association of \$5,000 annually.

The committee on purchasing of the Seattle association buys twice each year, using a regular requisition form. They have had little trouble in standardizing on most supplies, and expect this committee to be one of the most beneficial to the association. In 1920 the savings amounted to about \$1,400 and in 1921 about \$1,100, the difference being due to the falling market.

The procedure of the purchasing committee of the Cincinnati association is to secure prices on various articles, and if they appear attractive to advise the members who then order direct from the dealer or through the Committee. In either case the goods are billed direct to the consumer. The interest manifested by the members is not all that the committee feels it should be and considerable difficulty has been experienced with standardization.

In Duluth the members of the local association show a "regrettable lack of cooperation relative to the establishment of a

central purchasing agency." They are working at present on the question of collective buying of electric lamps and it is hoped that other articles will subsequently be considered.

In New York the subject of cooperative purchasing does not appear to be very enthusiastically considered by the members of the local association. This may be due in part to the fact that many of the older and more active members of the association represent large individual or management agency offices whose purchasing departments are well organized and handle a volume of business sufficient to obtain very favorable prices. The Committee has made several efforts to interest the members in the collective purchasing of some specific articles but without success. The Committee feels, however, that eventually this feature of association work will be regarded as important and advantageous.

From the above report, it appears that local association collective purchasing can be successfully carried out and will doubtless come more and more into use and be increasingly beneficial as its advantages are more widely recognized.

In order to bring to the attention of such local associations as have as yet no purchasing committee or organization, some of the general features of the functioning of such a body will be noted.

There is, without a doubt, a large list of materials, equipment and supplies used in buildings which can be purchased collectively to great advantage. Cooperative purchasing should result both in a reduction in the cost of commodities and also an increase in the quality of the materials bought. A secondary result of the work of a purchasing committee would be the establishment of fair prices through the issuance of comparative lists resulting in a saving to the association members, even though supplies were not purchased cooperatively.

Outlining in further detail some of the benefits of cooperative purchasing, the following may be noted:

- (1) Lower prices on articles which can be purchased in large quantities through combining the orders of many different buildings.

- (2) Lower freight rates through the larger volume of shipments, particularly if arrangements can be made for carload lot quantities.

- (3) Better quality of goods through more careful selection and as the result of purchasing equipment in accordance with information and specifications furnished by the Research Committee.

- (4) Larger volume of business should result in better service from the dealers as the business will be more attractive. The Committee on Purchasing should be able to closely watch the fluctuation of prices so as to take the maximum advantage of variations.

The greatest advantage resulting from cooperative purchasing will be felt in those goods which can be bought in large quantities and used generally by everybody. Goods that can be definitely specified so as to secure exactly competitive prices and that can be checked up with reasonable ease and goods that can be bought directly from the factory, lend themselves most readily to the scheme of cooperative purchasing.

In order for the plan of cooperative purchasing to be successful a real desire on the part of the members of the association for such a proposition must be manifested and backed up by active cooperation. A general standardization of articles to be purchased must be made. This is one of the most difficult elements of the whole matter, but it should be possible to overcome prejudices which may have been formed by a demonstration of the merits of the particular products and the monetary advantages accruing from collective buying.

One of the first steps in developing a plan for cooperative purchasing is to prepare lists of prices of materials being purchased by members. The local committee could prepare a list of articles used by a majority of the members on which each member would indicate the prices paid by him. From this list the committee can prepare a comparative price list showing the range of prices for similar articles. If a wide variance of prices is revealed in the price of certain materials, steps can be taken immediately by individual members to avail themselves of the lowest prices indicated. This would gradually establish fair and uniform prices. The necessary steps in carrying out cooperative purchasing would probably best be determined upon by the local association. It appears from the reports from the various cities that several methods are in use.

It is believed that a continuous exchange of experiences and methods between the local associations through the national organization will be most helpful, and that later on, through the cooperation of the Research Committee results of the greatest value to the members of the association may confidently be expected.

Respectfully submitted,

B. H. BELKNAP, Chairman, New York.

R. E. WISE, Atlanta.

E. J. KELLOGG, Minneapolis.

ARTHUR GIBBONS, Dayton.

E. N. HART, San Francisco.

ROYAL ALWORTH, Duluth.

A. D. WILSON, Denver.

C. B. BROWN, Seattle.

WILLIAM BUICK, Detroit.

E. H. WHITE, Portland.

V. A. SWAIN, Indianapolis.

A. R. STREATMAN, Cincinnati.

GEO. T. WOODBURY, Los Angeles

N. H. PIERSON, Baltimore.

THE PRESIDENT: I presume personal friendships existing between the seller and purchaser enter into this largely. It is expensive to somebody to have these friendships. We are running a cold-blooded business, and I think these sentiments and prejudices should be set aside.

When Mr. Belknap started on his report, I was almost going to ask whether you wanted to continue the National Purchasing Committee. It has no function except in Portland and Dayton.

The latter part of Mr. Belknap's report indicated the National Committee could function in tying together and probably keeping suggestions before the weaker sisters, and some day some fellow in a city which is not functioning now will say: "We should function, because look what they did in Dayton!"

It was moved the report be accepted and placed on file.

The motion was seconded.

CHARLES S. HOLBROOK, Portland: You spoke about a "nigger in the wood pile." Judging from the experience of the Portland Association, I think the main difficulty in what looks like co-operative buying is this: these were normal times. I think you will find a great deal of co-operative buying. There is a feeling now this is a falling market and nobody wants to tie himself up on a falling market.

THE PRESIDENT: We went into the business of purchasing groceries during the war. We had to watch our step very carefully. We were lucky. We closed our grocery store after three years' continuation with an even break, but we had to watch the market like a cat. We got caught on our sugar on a falling market for \$2,000 over night. If that risk can be distributed among all the affiliated members of the Association, you can take a chance, because, on all the breaks you will break to the good.

The motion to accept the report of the Committee on Purchasing then carried.

Report of Committee on Resolutions

David Whitcomb, Chairman, Seattle, Washington

(Presented by Alfred C. Kennedy, Omaha)

I beg leave to present the following resolutions and move their adoption:

I.

WHEREAS, the Great Ruler of our Destinies has called from our midst during this past year our esteemed friend and loyal member, William W. Lighthipe; and

WHEREAS, this assembly feels keenly the void thus left; gone is a personality rare to find and once discovered, never to be forgotten; be it therefore

RESOLVED, that we, the members of the National Association of Building Owners and Managers, do hereby record our deep affection for our departed brother, and as an expression of our sincere sorrow, may we rise and stand with heads bowed low; and be it further

RESOLVED, that this resolution be spread upon the proceedings of this convention and a copy sent to his family.

THE PRESIDENT: I ask the privilege of seconding the resolution.

The resolution was carried by rising vote.

II.

The National Association of Building Owners and Managers in convention at Bedford Springs Hotel, Bedford, Pennsylvania, June 19 to 24, 1922, missing the able leadership and the helpful and genial personality of Tom Bainbridge, Secretary of the Building Managers Association of Chicago, desires to express our best wishes for him in his illness, and the earnest hope that long before our next convention he may be restored to health and vigor.

The motion was seconded by Mr. Johnstone, and carried unanimously.

III.

In accordance with the suggestion made by Mr. Ira H. Woolson, of New York, following his paper read before the Association of Building Owners and Managers on Friday,

June 23, 1922, asking for the co-operation of the members of our Association; be it therefore

RESOLVED, that this convention as assembled recommend to the incoming Board of Directors that a committee be appointed to co-operate with the Building Code Committee of the Department of Commerce in furnishing live load weights as found in office buildings throughout the country.

The motion was seconded by Captain McIntyre.

THE PRESIDENT: This means setting aside several men for two or three days to go around with platform scales and actually weigh up furniture and office equipment until you can get sufficient data to say: "This table weighs 45 pounds; that chair weighs 20 pounds." Then go through the floors and list every piece of furniture. When you vote for it, promptly resolve that is one of the things you are going to do before next September.

MR. SWETLAND: I would like to know what benefit the members of this Association could derive from that form of activity?

MR. KENNEDY: It was the opinion of the Resolutions Committee we should not enter into a number of different things outside of our province, but that this particular matter is well within our province. Take, for instance, the example of my own city—Omaha. We are laboring with a building code in Omaha that is a handicap to us as compared with other cities in the surrounding territory. It costs us more to build in Omaha than in a number of other cities. If we were on an equal scale we could compete with other cities better. I believe it is in our province and we should do it.

THE PRESIDENT: It is a contribution to the statistics which the Federal Government can get—if not for nothing, at an expense to the taxpayers. It has been asked by the Chairman of one of the important functioning committees. I told Mr. Woolson if he would come to Bedford Springs and deliver this paper on Fire Prevention, I would do what I could to secure this information through you. It was a gentleman's agreement.

MR. APPEGARTH: I do not think you realize what it means. We have buildings in every city some of which are what you might call "skinned" to the limit—built just as cheaply as possible to make them stand. They throw that space on the market and compete with you who have put good money into a good building. This would stop that very thing. That other building may have a big bunch of repairs and expenses. But the building is promoted on an unsound basis and unsound cost. In order to have relative costs, you must have some standard; and this is toward

that end. The conservative man builds a better building and must compete with the cheap one.

The resolution was unanimously adopted.

IV.

WHEREAS, the National Association of Building Owners and Managers assembled in convention at Bedford Springs Hotel, June 19 to 24, 1922, has successfully concluded a most interesting program; and

WHEREAS, it realizes that this success has been largely due to the generous co-operation of many persons; therefore, be it

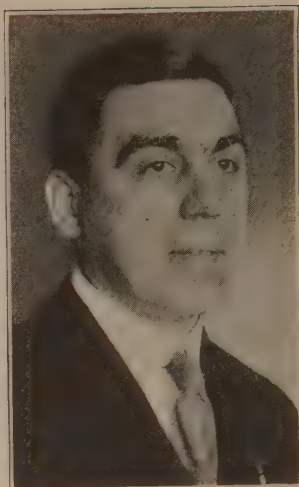
RESOLVED, that this Association herewith records its appreciation and expresses its gratitude for all the many and diverse attentions and services that have contributed to make the Fifteenth Convention of Building Owners and Managers a memorable success; and in particular expresses its thanks to Mr. Martin Sweeny, the Manager of the Hotel, and his efficient corps of assistants, who have continuously held themselves ready to assist in every detail; to Mr. Thos. F. Egan, of Philadelphia, who through many weeks has ably assisted the Convention Committeeman; to Mr. G. Bertram Regar of the Philadelphia Electric Company, and the group of five National and Olympic women swimming champions who so attractively staged a wonderful exhibition of swimming, and diving, for our entertainment; and to the various railroad officials who arranged the many itineraries and the transportation that brought the members together, and who are now to return us to our far-spread homes.

The resolution was adopted.

V.

WHEREAS, it has been considered worthy of scientific demonstration by learned men from the days of Plato down to the very platform of this convention of Building Owners and Managers, that no combination of minds can rise to greater heights than that of the best mind in the group; and

WHEREAS, a still truer fact has been ceaselessly demonstrated before each and every attendant of this Fifteenth Convention of Building Owners and Managers; now, therefore, be it



RESOLVED, that the National Association of Building Owners and Managers publish to the world this great truth: that no combination of hearts can rise to greater heights than can the heart of one friend, tried and true; and that this fact is indelibly inscribed on the annals of the Association of the heart of every member of this Convention; namely—

That FRANK X. MONVILLE, of Philadelphia, has demonstrated beyond power of questioning that by his guiding inspiration, his efficient and effective planning and his warm regard for the comfort, the convenience and the happiness of each and every person in attendance at this Convention, he has shown the maximum that can be achieved to make our Association meeting an unqualified success; and be it further

RESOLVED, that the members of this Association in attendance at Bedford Springs desire to express in warmest terms of appreciation their hearty thanks to our esteemed fellow member, and friend, Frank X. Monville.

The resolution was seconded and carried by rising vote, amid applause, and calls for Mr. Monville.

MR. MONVILLE: I have a lot of work to do yet.

VI.

WHEREAS, from annual meeting to annual meeting there are missing from our ranks certain loyal and loved friends and comrades in the work of this Association, due to their answering to the call of Death; and

WHEREAS, it is most fitting and appropriate that this Association in convention assembled pay respectful personal tribute to their memories, the Committee on Resolutions beg leave to report upon the passing of

Arthur H. Christy, New Orleans

M. B. Reddick, Baltimore

R. Tegler, Edmonton, Canada.

who have been called away during the last year.

The motion to adopt the resolution was seconded by Mr. Hall, and carried by silent standing vote.

VII.

The Resolutions Committee herewith submits the following resolution:

At a regular meeting of the Building Managers and Owners Association of New York, held Tuesday, June 13, 1922, at the office of the Association, 220 Broadway, it was regularly moved, seconded and carried that the following Resolution concerning the present method of voting at the annual convention of the National Association be submitted to the Committee on Resolutions at the next convention to be held in Bedford Springs, Pa., June 19 to 24, 1922:

WHEREAS, Article 5 of the Constitution of the National Association of Building Owners and Managers provides that only members present at the meetings shall be entitled to vote; and

WHEREAS, it is usual that the number of members attending the convention is a small proportion of the total membership of the Association, thus allowing a minority to vote for the majority; and

WHEREAS, the members who are unable to attend the convention are therefore disfranchised; be it therefore

RESOLVED, that this present condition be freely and openly discussed before the convention with the view of es-

tablishing a plan permitting affiliated associations to vote their full membership, whether present or not, giving active members the privilege of voting by proxy.

The matter has been ably presented and earnestly discussed. The members of your Committee, with one dissenting vote, hereby express their belief that under present conditions the members attending the meetings of the Association must continue to direct its affairs, and that the method of voting originally adopted at Minneapolis, and since incorporated into the By-Laws of the corporation, is the best method of conducting the Association.

Accordingly we recommend that this resolution be laid on the table.

COMMITTEE ON RESOLUTIONS.

The motion was seconded by Mr. Swetland, and carried unanimously.

Report of Nominating Committee

At the President's Dinner on Friday evening, June 23rd, Dean Vincent of Portland, Chairman, submitted the report of the Nominating Committee placing in nomination the following:

For President, Earl Shultz of Chicago.

For First Vice-President, Lee T. Smith of New York.

For Second Vice-President, Paul Robertson of Indianapolis.

For Third Vice-President, Isaac T. Cook of St. Louis.

For Corporate Secretary, Howard G. Loomis of Omaha.

For Treasurer, Wm. M. MacLachlan of Detroit.

For Directors: Waldo A. Avery, Detroit; E. M. Horine, Atlanta; Roy Kinnear, Seattle; John C. O'Callaghan, Philadelphia; and, E. E. Thorpe, New York.

THE PRESIDENT: We will now have the report of the Corporate Secretary, Mr. Loomis. (Applause, audience rising.)

HOWARD G. LOOMIS: President Coley asked your Corporate Secretary to prepare a historical sketch of the National Association. In doing so, I found so much of interest that it seemed an impossible task. However, I have gathered a few brief items that will be mentioned here so far as the time will permit.

Corporate Secretary's Report

Historical Sketch

of the

National Association of Building Owners and Managers

by

Howard G. Loomis, Omaha, Nebraska

CONVENTIONS

The National Association of Building Owners and Managers was born August 10, 1908, when seventy-five owners and managers met at the Auditorium Hotel, Chicago, for a three-days' convention. This first gathering consisted of building owners and managers from thirty cities as follows:

Baltimore	Detroit	Minneapolis	St. Louis
Buffalo	Duluth	Montgomery	St. Paul
Chicago	Grand Rapids	New York	Seattle
Cleveland	Indianapolis	Knoxville	Shelby
Columbus	Madison	Peoria	Springfield
Dayton	Memphis	Pittsburgh	Tacoma
Denver	Milwaukee	Portland	Terre Haute
		Rochester	Winnipeg

J. E. Randell of Chicago called the convention to order and welcomed the delegates. R. A. Lemcke, Indianapolis, acted as chairman the first day; J. H. Royse, Terre Haute, the second day, and Arthur B. Hall, Chicago, the third day. Nine papers were read and discussed.

In speaking of this first convention, Edward H. Doyle, Detroit, said:

"We went into that room, everybody watching the other fellow, and afraid of our lives that we would tell the other fellow something, even the people of our own town. We sat down there, kind of turned up our coats and didn't exactly know how far we ought to go; didn't want to tell the next fellow anything we knew, were afraid he would find out some-

thing we knew. But after the convention was in session for half an hour every one present was pleased to tell the other all he knew. I know it didn't take me long. But there were a large number of us and we had one jolly time.

To give you an idea how secretly and how carefully people guard what little they think they know, there were five from Detroit who went to that convention. No one knew how many were going. No one knew the other was going. He thought he would steal a march on the other fellow, but every one was there—every one."

SECOND CONVENTION

Second Convention, Detroit, September 13-14-15, 1909, was attended by most of those who attended the first meeting in Chicago and by many others. President Edward H. Doyle presided. Philip Breitmeyer, Mayor of Detroit welcomed the delegates. Fifteen papers were read and discussed.

The National Association of Real Estate Exchanges invited the National Convention of Building Owners and Managers to amalgamate and become a branch of the National Association of Real Estate Exchanges. The chairman appointed the following committee to consider the question:

Louis L. Banks, Chairman, Pittsburgh
Porter Pickett, St. Louis
Cullen Brown, Detroit
William G. Speed, Baltimore
William M. Ellis, Chicago.

The committee reported as follows:

"It would be unwise to adopt the proposition, inasmuch as we consider the problems of the management of office buildings are so far apart and divergent from those which confront the business of the general real estate agent, that it would be inexpedient to amalgamate these interests. Your committee believe that this convention should appreciate the courtesy extended by its president, Mr. W. W. Hannan for his splendid co-operation during this convention."

Upon motion duly seconded, the recommendation of the committee was unanimously adopted.

THIRD CONVENTION

Third Convention, Washington, D. C., September 12-13-14, 1910. William Gude, President of the Chamber of Commerce of Washington, welcomed the delegates and ladies

present. President Edward H. Doyle presided. Fifteen papers were read and discussed. Thirty-seven exhibitors took part in a manufacturers' exhibit held in connection with the convention.

FOURTH CONVENTION

Fourth Convention, Cleveland, July 10-11-12, 1911. President John C. Knight of New York presided. C. E. Terrill, President of the Cleveland Building Managers Association, welcomed the delegates as did also Mr. Walker, Vice Mayor of Cleveland. Alexander S. Taylor of Cleveland, President of the National Association of Real Estate Exchanges spoke briefly of the kinship existing between the two associations. A loving cup was presented to ex-President Edward H. Doyle of Detroit. Eleven papers were read and discussed.

At this convention a permanent organization was completed and a constitution and by-laws adopted.

About fifty manufacturers had exhibits in a room adjoining the convention hall.

FIFTH CONVENTION

Fifth Convention, Seattle, July 11-12-13, 1912. President John C. Knight of New York presided. George F. Cotterill, Mayor of Seattle, welcomed the visitors. Twelve papers were read and discussed. Forty-two manufacturers had exhibits in the exhibition hall.

SIXTH CONVENTION

Sixth Convention, Cincinnati, June 10-11-12-13, 1913. President Charles E. Horton presided. Eight papers and a number of committee reports were read and discussed. Eighty exhibitors took part in the manufacturers' exhibit held in the auditorium adjoining the convention hall.

SEVENTH CONVENTION

Seventh Convention, Duluth, July 14-15-16-17, 1914. President J. E. Randell presided. Mayor W. I. Prince of Duluth welcomed the delegates and ladies. Nine papers and a number of committee reports were read and discussed.

EIGHTH CONVENTION

Eighth Convention, Atlanta, September 14-15-16-17, 1915. President J. E. Randell presided. Honorable Nat E. Harris, Governor of Georgia, and Preston S. Arkwright of Atlanta, welcomed the visitors. Ten papers, a number of committee reports, and liberal discussion made up the program.

NINTH CONVENTION

Ninth Convention, St. Louis, September 12-13-14-15, 1916. President Charles E. Doty presided. Henry W. Keil, Mayor of St. Louis, welcomed the delegates and ladies present. Nine papers and addresses followed by discussions and committee reports made up the program.

TENTH CONVENTION

Tenth Convention, Omaha, September 10-11-12-13, 1917. President Charles E. Doty presided. James C. Dahlman, Mayor of Omaha, welcomed the visitors in behalf of the city, and Edwin S. Jewell extended a welcome in behalf of the Omaha Association. Ten papers were read and discussed.

ELEVENTH CONVENTION

Eleventh Convention, Chicago, June 20-21-22, 1918. This meeting marked the beginning of the second decade of the National Association in the same city where the first convention met in 1908.

President William Marshall Ellis presided. Edward M. Willoughby, President of the Building Managers Association of Chicago, welcomed the delegates and ladies. Nine papers were read and discussed.

TWELFTH CONVENTION

Twelfth Convention, Philadelphia, June 10-11-12, 1919. President William Marshall Ellis presided. George S. Webster welcomed the visitors in behalf of the city of Philadelphia and Adrien W. Vollmer extended a welcome in behalf of the Philadelphia Association. President Ellis and the Ex-Presidents present were presented gold badges by the Philadelphia Association. Thirteen papers were read and discussed.

THIRTEENTH CONVENTION

Thirteenth Convention, Minneapolis, June 23-24-25-26, 1920. President F. L. Swetland presided. Douglas A. Fiske welcomed the visitors in behalf of the city of Minneapolis and Ell Torrance, Jr., in behalf of the Minneapolis Association of Building Owners and Managers. Eleven papers were read and discussed.

At this convention the constitution and by-laws of the National Association were revised, and local Association affiliated membership provided for.

FOURTEENTH CONVENTION

Fourteenth Convention, Portland, June 21-22-23-24, 1921. President Gordon Strong presided. Honorable Ben W.

Olcott, Governor of Oregon, welcomed the visitors in behalf of the State of Oregon, C. A. Bigelow, acting Mayor, extended a welcome in behalf of the City of Portland, and Charles S. Holbrook for the Portland Association. Fifteen papers were read and discussed.

At this convention the formalities necessary for incorporating the National Association under the laws of the State of Illinois were adopted.

FIFTEENTH CONVENTION

Fifteenth Convention, Bedford Springs, Pennsylvania, June 19-20-21-22-23-24, 1922. President Clarence T. Coley presided.

It is interesting to note that a number of those who attended the first convention have also attended practically all of the succeeding meetings. Among those are President Clarence T. Coley, New York, Ex-President Charles E. Doty, Cleveland, Ex-President William Marshall Ellis, Chicago, and Ex-President Charles E. Horton, Seattle.

CONVENTION PAPERS AND ADDRESSES

More than one hundred and fifty papers and addresses delivered at the conventions of the National Association of Building Owners and Managers include practically every important phase of office building and apartment house planning, construction, operation and maintenance. These papers and addresses are the conclusions of leading architects, engineers, financiers, economists, large property owners, and building managers after careful study of the various subjects. They constitute the only comprehensive and authoritative collection of studies of the building management profession. All of these addresses have been published as a part of the proceedings of the various conventions. Members of the Association who have preserved this literature have a collection of great value which should become more and more valuable from year to year.

The following list, arranged alphabetically by authors, gives the title and year in which the various papers and addresses were delivered.

Allen D. Albert, Minneapolis—"The Building of American Cities"1914
Graham Aldis, Chicago—"The Unsoundness of Gratuitous Service to Tenants".....1920

Preston S. Arkwright, Atlanta—"Analyzing a Building from the Outside".....	1915
F. B. Arnold, Cleveland—"Essentials of Apartment House Management"	1917
William H. Ballard, Boston—"How to Make Old Buildings Pay"	1916
F. S. Bancroft, New York—"Co-operative Apartments".....	1910
Louis L. Banks, Pittsburgh—"How Should Leases Be Made"	1910
R. E. Barber, Pittsburgh—"Service".....	1917
Paul Bauder, Cleveland—"The Use and Abuse of Illumination"	1910
Reginald Pelham Bolton, New York—"Operation of Elevator Service"	1908
Reginald Palham Bolton, New York—"An Hour in an Elevator with an Expert".....	1909
"Depreciation of Building in Comparison with Rising Land Values"	1912
Frederick K. Boomhower, Chicago—"Economies in the Power Plant"	1914
Robert E. Booth, Seattle—"The Rental Business from a Legal Standpoint"	1912
Cullen Brown, Detroit—"More Net Revenue for Less Floor Space"	1910
J. Edgar Brown, Seattle—"Some of the Benefits to be Derived from a Local Association".....	1910
W. K. Brown, Pittsburgh—"What the Owner or Manager Should Know About the Various Materials and Equipment"	1909
William T. Buck, Philadelphia—"Building Up a Local Association"	1917
Charles J. Bullock, Boston—"The Taxation of Urban Real Estate"	1920
Edmund Burke, Chicago—"Some Heating Systems—Their Relative Merits and Efficiencies".....	1912
H. J. Burton, Minneapolis—"The Relation Between Earning Power and Land Values in Taxation Matters".....	1918
S. Morgan Bushnell, Chicago— "Central Station vs. Isolated Plants".....	1908
"Notes on the Technique of Fire Insurance Rates for Office Buildings"	1920
C. A. Campbell, Toledo—"A 100% Building for 100% Tenants"	1917

Asa G. Candler, Atlanta—"The Building Owner".....	1915
John A. Carroll, Chicago—"The Rental Value of Conven- ences"	1909
Charles H. Cheney, Portland—"City Planning and Zon- ing"	1921
L. R. Christie, Chicago—"Common Mistakes in Building Construction and How to Avoid Them".....	1912
Clarence T. Coley, New York—	
"The Gross and Net Cost of Operating to Gross Rents of Office, Loft and Apartment Buildings in New York City"	1909
"A Method of Checking the Economical Height of an Office Building.....	1913
"Office Building Plan and Floor Plan".....	1921
Rawson Collier, Atlanta—"Scientific Illumination".....	1916
Isaac T. Cook, St. Louis—	
"Promotion and Construction of Office Buildings".....	1917
"Financial Readjustments in Office Buildings".....	1919
R. H. Crow, Cleveland—	
"Apartment Houses"	1908
"The Apartment House Problem".....	1911
J. T. Curran, Seattle—	
"The Renting Problem".....	1908
"Efficient Local Associations".....	1920
J. Clydesdale Cushman, New York—"Charging Tenants for Electrical Current and Lamps".....	1919
E. H. Davidson, St. Paul—"The Greatest Building Prob- lem of Today—Building Confidence Between Capital and Labor"	1918
G. Richard Davis, New York—"Building Construction from an Investment Standpoint".....	1910
Robert S. De Golyer, Chicago—"Apartment House Con- struction from the Standpoint of the Investor".....	1917
Charles E. Doty, Cleveland—	
"Fire Insurance as it Relates to Buildings".....	1910
"The Building Manager and Agent".....	1915
"President's Annual Address".....	1916
"President's Annual Address".....	1917
J. F. Douglas, Seattle—"General and Special Service in Office Buildings"	1921
Edward H. Doyle, Detroit—"Business Maxims and Sug- gestions Worth While".....	1918

- C. M. Duncan, Little Rock—"The Great Efficiency of a Practical System of Comparison Records".....1912
- Guy W. Ellis, Rochester—"Discussion on Employes"..1911
- William Marshall Ellis, Chicago—
 "Local Organization, Methods and Advantages"....1908
 "The Value of Local Associations".....1909
 "Important Factors in the Success of an Office Building"1916
 "President's Annual Address".....1918
 "President's Annual Address".....1919
 "Office Rental Values".....1921
- Captain George O. Fairweather, Chicago—"Compensation for Building Management".....1921
- Dr. Robert H. Fernald, Philadelphia—"Are Our Fuel Resources Nearing Exhaustion?"1919
- Charles Flynn, New York—"Building Equipment".....1910
- J. J. Forbrich, Peoria—"Solving the Lighting Problem to Satisfy the Tenant Without Loss to the Building"..1912
- Charles M. Frey, New York—
 "Vermin Prevention and Extermination".....1911
 "Extermination of Household Pests and the Value of a Competent Exterminator".....1912
- Eugene N. Fritz, San Francisco—"The Progressive March of Furnished Apartments on the Pacific Coast"....1920
- C. J. Fuess, New York—"Legal Relations of Landlord and Tenant"1911
- H. H. Garfield, Rochester—"The Human Element of Renting"1909
- Ernest R. Graham, Chicago—"Standardization of Maintenance and Operation of Mercantile and Office Buildings"1916
- Harry Hall, New York—"Height of Office Buildings"...1921
- John H. Hall, Cincinnati—"The Building Manager's Contribution to Civic Development".....1914
- R. F. Hanke, Spokane—"Local Associations—How to Organize and Get the Best Results".....1913
- W. W. Hannan, Detroit—"Apartment Houses as Investments"1909
- R. D. Harper, Indianapolis—"Launching a New Building"1915
- A. L. Hawley, Seattle—"Operating Cost Per Rental Square Foot"1913

Hugh Henry, Portland—"Group Life Insurance"	1921
Ferd H. Heywood, Columbus—"Comparative Rentals of Office Buildings in Leading Cities"	1910
Ferd H. Heywood, Pasadena—"Retail Rental Values" ..	1921
Alfred Higbie, Washington—"The Qualifications of a Building Manager"	1910
E. M. Hill, Buffalo—"Cost of Operation, and Proportion of Fixed Charges, Including Interest and Deprecia- tion Chargeable to Light, Heat and Power"	1911
Colonel John A. Holabird, Chicago—"Office Buildings in Elevation"	1921
E. M. Horine, Atlanta—"Legislation"	1917
Charles E. Horton, Seattle— "President's Annual Address"	1913
"Some Things"	1917
Solomon S. Huebner, Philadelphia—"Conservation of the Financial Value of Human Life"	1919
E. S. Hughes, Minneapolis—"Janitor and Elevator Serv- ice"	1912
Edwin S. Jewell, Omaha— "Measuring Floor Area"	1915
"The Comparative Investment Value of Office Build- ings of Various Heights"	1920
F. Robertson Jones, New York—"Why Employers Should Favor Compensation for Industrial Accidents"	1914
Louis T. Kaiser, Cincinnati—"Smoke Abatement and Boiler Furnace Operation"	1913
James S. Kemper, Chicago—"The Burning Ratio of Office Buildings and Its Relation to the Fire Insurance Cost"	1919
Albert Kern, Detroit— "Efficiency and Cost of Janitor Service"	1909
"Sub-tenants"	1916
George C. King, Detroit—"Operation in Relation to the Tenants"	1909
Charles H. Klein, New York—"Alterations"	1921
John C. Knight, New York— "President's Annual Address"	1911
"President's Annual Address"	1912
William M. Knight, Chicago—"Subdivision of Space and Alterations for Tenants"	1914

Donald Lawder, Chicago—"Putting Your Building on the Map"	1914
R. A. Lemcke, Indianapolis—"Systematic Management"	1908
Howard G. Loomis, Omaha—"Remodeling an Old Building"	1912
George Loring, Cleveland — "Economy in Electric Lamps"	1908
A. J. Lormor, Vancouver—"Promotion, Construction and Management of Canada's Office and Apartment Buildings"	1912
Charles F. McBride, Pittsburgh—"Uniform Keeping of Cost of Operation and Advisability of Making Comparisons with Other Buildings"	1911
Albert A. McCaslin, Cleveland—"Land Values"	1921
M. W. McIntyre, Cincinnati—"September, 1917"	1917
W. M. MacLachlan, Detroit— "The What, Who and How of Service in Office Buildings"	1919
"Organization of a Salaried Manager's Office"	1921
Benjamin H. Marshall, Chicago—"High Class Apartment Investments"	1918
J. A. Martin, Spokane—"Elevator Erection and Maintenance"	1912
Everett M. Matthews, Philadelphia—"Service of the Building Manager During Building Construction" ..	1919
Carl J. Maural, Chicago—"Some Matters on Which a Building Manager Should Be Informed"	1913
Dr. F. H. Millener, Omaha—"Elevators"	1915
Osborne Monnettee, Chicago—"Your Relation to the Coal Problem as Buyers, Users and Citizens"	1918
F. X. Monville, Philadelphia—"Wiring and Lighting in the Modern Building"	1918
J. G. Morgan, St. Louis—"Safety First"	1920
George T. Mortimer, New York— "Why Owners Should Consult a Building Manager in Selecting a Site and Erecting a Building; Mistakes to Be Avoided Thereby"	1911
"Skyscrapers, Past, Present and Future"	1915
Reginald W. Murray, New York—"Apartment Buildings of the Better Class"	1919
Charles C. Nicholls, Jr., New York—"Methods of Determining Values for Retail Stores"	1919

H. L. Oldham, Decatur—"Manager's Standpoint of Liability"	1910
G. Oppenlander, Denver—"Specialized Buildings"	1911
John A. Pedeler, New York—"The Economy of a Local Repair Department vs. Contractors"	1909
Walter W. Pollock, Cleveland—"Scientific Appraisals" ..	1914
E. M. Potter, New York—"Service"	1915
J. E. Randell, Chicago—	
"Systematic Office Building Management"	1909
"Duties of a Building Manager During Construction of a Building"	1913
"President's Annual Address"	1914
"President's Annual Address"	1915
Edward A. Renwick, Chicago—"The Investment Problem in Office Buildings"	1918
Claude B. Ricketts, St. Louis—	
"The Manager's Personality as a Factor in Successful Superintendency"	1909
"Employer and Employee"	1910
"Salesmanship in Office Building Management"	1915
C. M. Ripley, New York—	
"Operating Methods and Cost of Buildings"	1909
"Heat, Light and Power in Buildings"	1910
H. C. Robinson, Cleveland—"Ninety-nine Year Lease and Its Effect on Office Building Financing"	1916
William T. Ropes, New York—"Local Associations and Their Relation to the National Association of Building Owners and Managers"	1919
J. H. Savage, San Antonio—"Tenants! How to Land Them for That New Building and How to Keep Them"	1912
Henry Schroeder — "History of Incandescent Lamp Manufacture"	1911
Edwin J. Seward, Detroit—"Varnish"	1908
Earle Shultz, Chicago—	
"Readjustments in Building Operations to Meet War-Time Conditions"	1918
"Isolated Heating and Lighting Plants vs. Central Station Service"	1919
"What Should Your Gross Rentals Be?"	1920
Edward D. Sidman, Rochester—"Ventilation"	1908

Lee Thompson Smith, New York—	
"Campaigning for Office Building Tenants".....	1919
"Qualifications of a Building Manager".....	1921
Isaac F. Stark, Louisville—"Sub-Leasing of Office Space"	1920
Paul Steinbrecher, Chicago—"Apartment Houses".....	1915
Joseph G. Steinkamp, Cincinnati—"Building Codes".....	1913
Simon W. Straus, Chicago—"Office Building Bonds"...	1914
Colonel Gordon Strong, Chicago—	
"Fundamentals of Office Building Business for Prof- it"	1920
"President's Address"	1921
Robert H. Strong, Portland—"Property Owners vs. Voter"	1917
F. L. Swetland, Cleveland—	
"Local and National Association from an Owner's Standpoint"	1918
"President's Annual Address".....	1920
E. Everett Thorpe, New York—"Apartment House Rents"	1921
J. S. Thurman, St. Louis—"Cleaning Problems".....	1908
Ell Torrance, Jr., Minneapolis—"Building Manager's Compensation"	1917
Henry C. Tulley, St. Louis—"Elevator Service, Signals and Accessories"	1911
Adrien W. Vollmer, Philadelphia—"The Ethics of Office Building Ownership and Management".....	1920
Whitney Wall, Duluth—"Systematic Records and Re- ports"	1911
J. M. Walshe, Little Rock—"Purchasing Supplies for an Office Building"	1910
Edwin Wasserman, San Francisco—"A Practical System of Accounting for Office Buildings".....	1910
S. G. Webb, Chicago and New York—"An Analysis of the Comparative Efficiency of Interior Partitions"..	1912
Franklin H. Wentworth, Boston—"Significance of Fire Waste"	1914
David Whitcomb, Seattle—"The Relation of Business Realty to Government".....	1916
F. M. Willoughby, Chicago—"Central Agency Manage- ment as Against Individual Management of an Office Building"	1913

SECRETARIAL CONFERENCE

At the 1914 Convention in Duluth, the Secretarial Conference was organized. This conference includes all officers of local associations and usually holds luncheon meetings during the conventions.

The object of this conference has been to study and exchange ideas between members of local associations and to help the National Association in all practical ways.

Fred T. Bradley, Seattle, was the first chairman, and since that time the secretaries present at the conventions have selected a chairman for the following year.

At the Portland Convention in 1921, the Secretaries formed a permanent organization, "The Associated Secretaries of the National Association of Building Owners and Managers" with T. E. Bainbridge of Chicago, President, and C. F. Merritt, New York, Secretary-Treasurer.

APARTMENT HOUSE CONFERENCE

At the first Convention in 1908 an Apartment House Conference was suggested, but it was not until 1916 that it became a reality. At the St. Louis Convention and at each succeeding meeting the Apartment House Conference has held meetings usually at the luncheon hour and has had a part in the convention program.

Paul Steinbrecher, Chicago, was the first chairman, and since that time the apartment house men at each convention have selected a chairman for the ensuing year.

LIVE TOPICS CONFERENCES

Beginning in 1917, and continuing at each succeeding convention there have been held Live Topics Breakfast Conferences, where important questions are discussed by the members present. A chairman for each day is appointed by the President of the Association. These conferences have developed much interest at times and are considered of great importance by many members.

MEMBERSHIP GROWTH

Membership from the year 1908 to 1911 was not on a definite basis. Since the permanent organization was formed in 1911 membership has increased steadily and at the Bedford Springs Convention over 1,340 members were reported—a growth of about one thousand per cent since 1911.

AFFILIATED ASSOCIATIONS

Since the Minneapolis convention when affiliation was provided for, 27 local associations have affiliated as follows:

Atlanta	Detroit	New York
Baltimore	Duluth	Oakland
Birmingham	Indianapolis	Omaha
Buffalo	Jacksonville	Portland
Chicago	Los Angeles	St. Louis
Cincinnati	Louisville	St. Paul
Cleveland	Memphis	Salt Lake City
Dayton	Minneapolis	San Francisco
Denver	New Orleans	Seattle

Ten of the above associations have paid Secretaries devoting their time to association work.

INSURANCE COMMITTEE

Early in 1911 the work of the Insurance Committee of the National Association began, and at each convention since that time there has been an insurance report that has shown much study and valuable work accomplished.

The first committee appointed was:

Charles E. Doty, Chairman, Cleveland
J. T. Curran, Seattle
Cullen Brown, Detroit
T. E. Bainbridge, Chicago
George T. Mortimer, New York

Some changes in the personnel of the Committee have been made at various times, but in general the work has been continuous. In 1916 Henry N. Staats was employed to collect data and to develop the insurance question. The Insurance Committee has from the first, urged that a separate classification of fire proof office buildings would show that the premiums collected on such structures are entirely out of proportion to the losses incurred. There seems to be good reason to believe that the work of the National Association through its Insurance Committees has been an important factor in the gradual reduction of insurance rates on office buildings, and that the changed attitude of the insurance companies, with regard to developing a separate classification for office buildings is the direct result of this work.

MUTUAL INSURANCE

The data collected on the Insurance surveys indicated that losses were less than eleven per cent of the premium

receipts. In order to obtain accurate information, which could not be secured from the Stock Insurance Companies. The Building Owners Federation of Mutual Fire Insurance Companies was organized, composed of eight companies previously writing mutual insurance in other fields. In addition to obtaining experience figures, Mutual Insurance has enabled our members to make considerable saving for their buildings in this item.

TAXATION COMMITTEE

The National Association has, through its committees, studied the many problems in connection with

Real Estate Taxation

Income Taxes

Depreciation and Obsolescence.

As chairman of the committees at different times important reports have been furnished by

T. E. Bainbridge, Chicago

John H. Hall, Cincinnati

David Whitcomb, Seattle

Hozen J. Burton, Minneapolis

C. T. Moffett, Minneapolis.

During the three years that Mr. Burton acted as Chairman of the Committee, he traveled from coast to coast and interviewed tax authorities in many cities. He had printed and furnished free to members of the National Association, reports of great value. In connection with this work Mr. Burton spent several thousand dollars of his own money and contributed of his valuable time much more than the amount of the money spent.

Mr. Moffett has for two years carried on this work, giving liberally of his time and money in furthering the interest of the members of the Association.

FLOOR MEASUREMENT

For years building managers felt the need of a uniform system of floor measurement. This need was especially apparent when managers undertook to compare their experiences.

A committee headed by A. L. Hawley, Seattle, presented a report on floor measurement at the Duluth Convention in 1914, but no concrete recommendations were made. President Randell appointed another committee for the fol-

lowing year headed by Edwin S. Jewell of Omaha. This committee took up the question with the entire membership and presented a comprehensive report at the Atlanta Convention in 1915. The Standard Method of Floor Measurement was unanimously adopted and has been the authority with building managers, architects, engineers and in the courts since that time.

This Standard Method of Floor Measurement is published in pamphlet form, and has been adopted by local associations throughout the country.

OPERATING EXPERIENCE EXCHANGE

Having adopted a system of floor measurement, the next step was to establish a standard classification of income and expenditures.

A committee, headed by Edwin S. Jewell, Omaha, after studying the various uses of buildings, the varying ages of the structures, the diversity in operation, equipment, book-keeping methods, etc., and after many recommendations from members, presented a plain, simple classification schedule which was adopted at the St. Louis Convention in 1916.

An Experience Exchange based upon the classification form adopted, was conducted in 1917, 1918, 1919 and 1920. One hundred and fifty buildings were included in the 1920 Experience Exchange.

ACCOUNTING AND EXCHANGE COMMITTEE

The success of the Operating Experience Exchange in the form adopted in 1916 led to a demand for something more comprehensive. In connection with the work of the Chicago Association, a committee, headed by Earle Shultz, Chicago, developed a complete system of accounting for office buildings which was adopted at the Portland Convention in 1921. An Experience Exchange conducted by the same committee in 1921 and 1922 has furnished to the members taking part in that Exchange valuable comparisons carried out to a percentage basis, and a complete analysis of the receipts and expenditures.

PLUMBING

Edward H. Doyle presented the following resolution on plumbing at the Fourth Convention in Cleveland in 1911:

"WHEREAS it is a well known fact that for many years the National Association of Manufacturers and Dealers in plumbing supplies and fixtures has maintained one of the most outrageous and unfair trusts, and has defied all laws and decency in their method of controlling the sale of plumbing supplies and fixtures through plumbers, and refusing to sell direct to anyone except through a plumber, who insists on installing same at an extravagant cost to the purchaser, notwithstanding the fact that building managers and owners use much more material than some of these plumbers, they cannot buy in the open market.

"THEREFORE, be it resolved, that the chairman appoint a committee of five members of this association, whose duties it shall be to take such action as to them seems best and advisable through National, state and city legislation, that will put an end to such unAmerican methods as now prohibit us from purchasing where we please, thus breaking up such dark lantern methods—and that such committee be given full power to act and report all proceedings at the next convention."

This resolution was unanimously adopted.

A committee was appointed, and the Association took an active part in the prosecution of several cases in the United States courts after the adoption of that resolution.

RESEARCH COMMITTEE

Soon after the Minneapolis Convention in 1920 President Strong appointed a Committee on Research with W. H. Ballard, Boston, as its chairman. The Committee did valuable preliminary work which Colonel Strong has in 1922 undertaken to carry along to definite conclusions. Colonel Strong has, at his own expense, employed a competent engineer to conduct tests with the idea of giving to the National Association the benefit of all the work undertaken.

CODE OF ETHICS

At the Portland Convention in 1921, a Code of Ethics was approved which has been adopted, during the past year, by six of the local Associations.

SERVICE COMMITTEES

Committees, handling many other questions of interest to members of the National Association, have been working since the early life of the organization to give to the members the results of their study. In doing this work, the

members of each committee have done much unselfish work of great value to the members of the Association, but with even greater value to themselves.

The present nine Service Committees of the National Association include the Chairmen of corresponding Committees in local Associations. These Committees bring the experience of their particular problems to members in other cities, and are as follows:

Ethics	Insurance	Purchasing
Renting	Research	Accounting and
Legislation	Employment	Exchange
Taxation		

BULLETINS

At the suggestion of President Doty in his annual address in 1916, a bulletin was published, by the Secretary, monthly from October, 1916 to June, 1920.

Since the reorganization of the Association in 1920, and the establishment of an Executive Office in Chicago, a much larger Bulletin has been issued from that office. These bulletins have kept the members in close touch with the work of the National Association.

Local associations in a number of cities also publish regular bulletins and exchange them with other associations, thereby giving each local association the benefit of what is done in other cities.

ENTERTAINMENT

At each convention, the committee from the convention city has provided entertainment to add to the enjoyment of those meetings. This entertainment has frequently consisted of automobile rides, boat rides, dinners, or such other recreation as the local committee cared to provide.

Convention trips have also been frequently arranged where those attending these annual gatherings, meet at some convenient point and travel together. In 1921 a company of eighty-five made up a special train at Cleveland and traveled together through the western part of the country for several weeks, stopping at Portland for the convention and at many other places of interest.

CONVENTION PROCEEDINGS

The convention papers and addresses, the committee reports, and the discussions at these annual meetings have been printed soon after each convention and mailed to all mem-

bers. They constitute a library of valuable works on all phases of the Building Management Profession. Since 1913 these volumes have been printed in uniform size, six by nine inches, and each volume contains from about two-hundred to more than six-hundred pages.

OFFICERS

A list of the officers serving the National Association follows:

PRESIDENTS

*Edwin H. Doyle, Majestic Building, Detroit.....	1908-10
John C. Knight, Metropolitan Life Building, New York	1910-12
Charles E. Horton, New York Building, Seattle....	1912-13
*J. E. Randell, Continental and Commercial Bank Building, Chicago	1913-15
Charles E. Doty, Hippodrome Building, Cleveland..	1915-17
William Marshall Ellis, Old Colony Building, Chicago	1917-19
F. L. Swetland, Swetland Building, Cleveland.....	1919-20
Colonel Gordon Strong, The Republic Building, Chicago	1920-21
Clarence T. Coley, Equitable Building, New York...	1921-22
*Deceased	

VICE-PRESIDENTS

Claude B. Ricketts, St. Louis.....	1911-12
William Marshall Ellis, Chicago.....	1912-13
Charles E. Doty, Cleveland.....	1913-15
L. L. Banks, Pittsburgh.....	1915-16-17-18
William Marshall Ellis, Chicago.....	1916-17
E. M. Horine, Atlanta.....	1918-20
David Whitcomb, Seattle	1920-21
Dean Vincent, Portland.....	1921-22
W. H. Ballard, Boston.....	1920-21
Earle Shultz, Chicago.....	1921-22
Ell Torrance, Jr., Minneapolis.....	1920-22

TREASURERS

Clarence T. Coley, New York.....	1908-11
Frank C. Haupt, Milwaukee.....	1911-13
L. L. Banks, Pittsburgh.....	1913-15
C. F. Wilkinson, Atlanta.....	1915-16
David Whitcomb, Seattle.....	1916-17
Ell Torrance, Jr., Minneapolis.....	1917-19
Lee T. Smith, New York.....	1919-22

SECRETARIES

Charles E. Doty, Cleveland.....	1908-09
C. A. Patterson, Chicago.....	1909-14
Howard G. Loomis, Omaha.....	1914-22

EXECUTIVE SECRETARIES

Elmer H. Tyner, Chicago.....	1920
Lewis B. Ermeling, Chicago.....	1921-22

EXECUTIVE COMMITTEE

(Names of members arranged alphabetically)

Waldo A. Avery, Detroit.....	1920-22
W. H. Ballard, Boston.....	1920-21
Louis L. Banks, Pittsburgh	1910-11; 1913-16; 1917-18
Fred T. Bradley, Seattle.....	1911-12
Hughes Bryant, Kansas City.....	1913-14
Claude A. Campbell, Toledo.....	1919-20
D. F. Carew, Boston.....	1915-16
Clarence T. Coley, New York.....	1908-11; 1916-17; 1920-22
J. T. Curran, Seattle.....	1908-09
Charles E. Doty, Cleveland.....	1908-09; 1913-19
Edward H. Doyle, Detroit.....	1908-10; 1917-18
William Marshall Ellis, Chicago.....	1912-13; 1916-20
John H. Hall, Cincinnati.....	1918-19
Frank C. Haupt, Milwaukee.....	1911-13
E. M. Horine, Atlanta.....	1918-22
Charles E. Horton, Seattle.....	1910-11; 1914-15
John C. Knight, New York.....	1909-12
Howard G. Loomis, Omaha.....	1913-22
William M. MacLachlan, Detroit.....	1914-15
F. X. Monville, Philadelphia.....	1920-21
C. A. Patterson, Chicago.....	1908-14
J. E. Randell, Chicago.....	1913-15
Claude B. Ricketts, St. Louis.....	1909-10; 1911-12
Earle Shultz, Chicago.....	1921-22
Frank S. Sidway, Buffalo.....	1913-14
John T. Sloan, Jr., New Haven.....	1912-13
Lee Thompson Smith, New York.....	1919-22
John E. Stephenson, Duluth.....	1914-15
Colonel Gordon Strong Chicago.....	1920-22
F. L. Swetland, Cleveland.....	1919-22
Clarence E. Terrill, Cleveland.....	1911-12
Tysilio Thomas, Newark	1911-12
E. Everett Thorpe, New York.....	1921-22
Ell Torrance, Jr., Minneapolis.....	1915-19; 1920-22
Dean Vincent, Portland.....	1921-22
Whitney Wall, Duluth.....	1913-14; 1918-19

John M. Walshe, Little Rock.....	1910-11
David Whitcomb, Seattle.....	1916-18; 1919-21
Charles F. Wilkinson, Atlanta.....	1915-16
Guy H. Wright, St. Louis.....	1912-13; 1916-17

CONVENTION COMMITTEEMEN

John H. Hall, Cincinnati.....	1912-13
Whitney Wall, Duluth.....	1913-14
Charles F. Wilkinson, Atlanta.....	1914-15
Guy H. Wright, St. Louis.....	1915-16
Edwin S. Jewell, Omaha.....	1916-17
W. N. Murray, Chicago.....	1917-18
F. X. Monville, Philadelphia.....	1918-19
F. X. Monville, Bedford Springs.....	1921-22
Ell Torrance, Jr., Minneapolis.....	1919-20
Dean Vincent, Portland.....	1920-21

Respectfully Submitted,

HOWARD G. LOOMIS, Omaha,
Corporate Secretary.

THE PRESIDENT: I can see by your faces you are well pleased with those historical reminiscences of our Association.

Only a few days before I came to this convention, one afternoon Mrs. Coley and I went to the garret. We opened an old trunk. Digging around, we found a lot of sentimental letters and old photographs—some of me in knee pants and with curly hair. That little hour was a pleasure. I have the same kind of a sensation this minute in hearing this history of this Association. Those of us who have been functioning for several years have a sentimental love for this Association. We have had good old speeches on the floor. We have learned a lot. When the conventions have come to a close, we have gone back to our homes with a kind of sorrow in our hearts because we have known before we could meet again a lot of the vicissitudes of life would enter into our lives. Some would never meet us again. We were very anxious for the next convention to come.

Lately we have been functioning a little more intensively between the conventions, and once in a while we see the names of the boys entered in the Bulletin.

I make a motion that this very ably prepared paper be accepted with thanks.

MR. HOLBROOK: I would like to call the attention of the gentleman to the fact that Portland is in the State of Oregon. We of Portland must at all times fight Seattle propaganda! (Laughter.)

The motion to accept the report was seconded by Captain McIntyre, and carried.

Report on "The Bulletin"

Colonel Gordon Strong, Editor, Chicago

This is supposed to be a report of the Committee on Bulletins. I have to take three exceptions to that announcement: In the first place, there is no report. In the second place, there is no Committee. And in the third place, there is no Bulletin, or if there is, you do not know it. (Laughter.)

I do not suppose anybody has any views on the Bulletin he would like to express. In the absence of those views, I am going to suggest to my successor the letting out of the Bulletin to an independent contractor who will be able to sense the literary taste of this Association.

For example, I have here a publication called Secret Service, about old and young King Brady, detectives.

(Reads some very sensational paragraphs of the "Diamond Dick" variety.)

That, gentlemen, I presume is what you want, because God knows you did not want what we gave you! (Applause.)

(Three cheers were given for "Old King Brady.")

I will ask that these two tables be printed in the proceedings, so that the records will be complete.

THE BULLETIN—TABLE NO. 1
NUMBERS AND PAGES
1920-21—1921-22

Issue	1920-21		1921-22	
	Bulletin	Supplement	Bulletin	Supplement
July.....	8	..	32	..
August.....	16	..	24	..
September.....	16	..	{..	{..
October.....	8	..	{20	{..
November.....	16	..	20	..
December.....	16	..	24	..
January.....	20	..	28	..
February.....	8	..	{..	{..
March.....	20	..	{16	{20
April.....	16	36	{..	{..
May.....	24	24	{16	{20
June.....	24	16	..	..
Total numbers.....	12	3	8	2
Total pages.....	192	76	180	40
Aggregate pages.....	268		220	

THE BULLETIN—TABLE NO. 2

CONTENTS		Total for year
Pages.....		220
Columns.....		440

CAPTIONS	Columns	Figures in Percentages
Title	5.6	.013
Index	7.0	.015
Miscellaneous	0	...
Total	12.6	.028

BUSINESS		
World	33.9	.077
Reprints	12.4	.028
Miscellaneous	2.6	.005
Total	48.9	.110

ASSOCIATION		
Editorial	13.4	.030
Convention—1921	2.8	.006
Convention—1922	19.4	.044
Board Directors	3.8	.009
Organization (1)	26.7	.060
C. on Renting	32.4	.073
C. on Taxation	49.3	.112
C. on Accounting	17.0	.038
C. Miscellaneous	12.0	.027
Local Associations	47.6	.115
Membership	13.7	.031
Personal	9.3	.021
Miscellaneous	6.5	.015
Total	253.9	.581

PROFESSION		
General	32.4	.073
Economics	36.4	.082
Law	13.8	.031
Leases	39.4	.089
Miscellaneous	2.6	.006
Total	124.6	.281
Total for the year.....	440	100

(1) Includes charts of committees.

ADRIEN W. VOLLMER, Philadelphia: I move the report of the Bulletin Committee be rejected and expunged from the records.

The motion was seconded by Mr. Horine, and carried.

Report of Executive Secretary

Lewis B. Ermeling, Chicago, Illinois

To the National Association of Building Owners and Managers:

Your Executive Secretary, in presenting this report, will attempt to cover the activities of the Association Office for the past year. In order that there may be a clear understanding of your interest and your responsibility, it may be unnecessary on my part to remind you that the National Association of Building Owners and Managers is your Association. And your Association can only succeed in accomplishing the Association work which you support.

The Association office is different in one respect from the office of your local Association. When your local Secretary wishes to communicate with the members of a committee, he can probably reach them all by phone in half an hour. Our members are widely scattered, and when your National Secretary wishes to reach the members of a Committee, letters must be written to twenty-seven different cities. By shortest time, it will be six days before all replies can be received. This means a large volume of correspondence.

During the past year, the Association office has sent out, among other things, the following:

3,340 personal letters from the Secretary, and some 750 from the other officers located in Chicago.

6,315 circular letters on the Revenue Bill; the Obsolescence Survey, etc.

Eight Bulletins, with two supplements, totaling 13,890 pieces of printed matter with two Questionnaires, totaling 2,540 additional.

The Condensed Report of the Accounting and Exchange Committee; the Final Report and the Standard Form of Statement for the Experience Exchange as sent to our members, totaling 3,790 pieces of mail.

Two Convention circulars and the Official Notice of the Convention totaling in excess of 7,000.

Seven membership letters totaling over 10,200.

The total of these major items exceed 47,800 pieces of mail for the Association during the past year.

Through the courtesy of Colonel Strong, the Association office remained in the Republic Building until February 1st, when our new offices in the Edison Building were taken over.

During the year, the plan of Committee organization, as proposed by Vice-President Shultz, whereby the Chairman of each

Local Association Committee becomes a member of the corresponding National Association Committee was put into force. It has resulted in a material increase in local Association Committees, and this is clearly shown by the list of Service Committees published in the Bulletin from time to time. In the September-October Bulletin, fifty-two local Association Committees were listed as representing the twenty-two Associations affiliated at that time. It is gratifying to note that in the last Bulletin, the Service Committees were represented by one hundred and thirty-two local Committees from the twenty-seven affiliated Associations.

Under this Committee plan, the Association's Survey on Obsolescence resulted in data being submitted for one hundred and fifty-five buildings, and the analysis of obsolescence changes in the business district of some nine cities. This increased activity in the local Association interest is probably responsible for receiving the Standard Form of Statement for over one hundred and forty buildings for our 1921 Exchange. The work of the Service Committees has been outlined by the respective chairmen. Your Secretary wishes to take this opportunity to thank the Committee members, and the Chairmen especially for their splendid co-operation during the past year.

Since the Portland Convention, your Secretary has visited nine of the affiliated Associations, outside of Chicago, and has visited three other local Associations in the interest of having them organize, or where organized, to affiliate with the National Association. The list of affiliated cities having paid Association Secretaries has increased to ten. Our Associations in New York, Atlanta, Seattle, Portland, Cleveland, Cincinnati, Chicago, San Francisco, Los Angeles and Louisville have salaried Secretaries devoting their time to local Association work. In the above cities it has proven successful, and it is recommended to all local Associations. It is not a question of necessary finances to maintain a salaried staff. In the above cities which maintain salaried staffs, the returns give evidence that your properties cannot afford to be without the advantages from a strong Association having a salaried staff.

During the year, requests for specific information on operating problems, have been received from a number of our members. This is a service which the members should use whenever opportunity is presented, and in using the Association office in this way in time a valuable fund of information will be developed.

In the Bulletin of the Association, an attempt has been made to summarize rental conditions throughout the country so that our members may be posted on a most important phase of their work—the renting of space at a profit. Your suggestions and criticisms of this part of the Bulletin are desired. One interesting survey was made for a member from Salt Lake City so that

a definite five-year rental policy could be outlined by his Company for their Office Building property.

The demand for the Classification of Accounts, as prepared by the Accounting and Exchange Committee, was so heavy that the Officers authorized the reprinting of this report. It is a complete accounting system which our members should use. From it accurate costs can be determined, and we urge that it be given the consideration which it deserves.

The Code of Ethics, as approved at the Portland Convention, has been printed for distribution among our members, and also among our prospective members.

The work of the Association on the Revenue Bill, the endeavor to secure a higher depreciation allowance to include obsolescence for our buildings, the Experience Exchange for 1920, the Employment Committee Survey, and other activities need no further mention.

From my trips to various cities, the experience gathered through meeting prospective members assures me that the Association is becoming more widely and better known. In the last analysis, however, the success of the Association is dependent upon you—upon each individual member. This will prove true in at least two ways. First, more of the members should take, and are taking, a more active part in the Association activities. Second, each member should assist the Association by helping to organize new Associations, urging them to affiliate with the National Association; and, thus enable us to undertake other services.

Some of the proposed undertakings for the Association have not been put into force on account of limited finances. It is desirable to secure an assistant in the Association office for investigational and for cost accounting work. In this way, definite studies could be made for our members, and through the facilities of the Association Office and our individual members, could secure information on various problems. When undertaken individually by members, it would undoubtedly be at a much larger cost.

Educational work through the Association can be undertaken when a sufficient interest and adequate finances are provided. There is no question about the need for this training, nor the ultimate benefit which would return to our properties. The National Association is the logical organization to sponsor this activity. Associations in other fields have found that proper educational work was worth while and they did not have the wide range of subjects to consider which our business requires.

Respectfully submitted,

LEWIS B. ERMELING.

Upon motion, the report was received and placed on file. Adjournment was then declared until Saturday morning.

Saturday Morning Session

JUNE 24, 1922.

President Coley called the concluding session of the convention to order at 10:15 on Saturday morning.

THE PRESIDENT: I want to take this opportunity to acknowledge publicly our appreciation—and the President's appreciation, particularly—of the co-operation given to this convention by Martin Sweeney, manager of this hotel. I am sure our stay here has been made very enjoyable. We have had the freedom of the hotel and all its facilities and the grounds.

I also want to recognize the co-operation and assistance given Mr. Monville by Mr. Egan, secretary of the Philadelphia Association. He has assisted in the arrangements for this convention, and only through his co-operation in giving Mr. Monville the necessary assistance has this convention been such a success.

NEW BUSINESS

E. EVERETT THORPE, New York City: I move that the resolution which was presented by the New York Association and read before this meeting yesterday be taken from the table.

MEMBER: I will second it, and say the purpose of bringing this before the convention is so that we may have an open discussion.

MR. THORPE (Reads):

"At a regular meeting of the BUILDING MANAGERS AND OWNERS ASSOCIATION OF NEW YORK, held Tuesday, June 13th, 1922, at the office of the Association, No. 220 Broadway, it was regularly moved, seconded and carried that the following Resolution concerning the present method of voting at the Annual Convention of the National Association be submitted to the Committee on Resolutions at the next Convention to be held in Bedford Springs, Pa., June 19th to 24th, 1922:

WHEREAS, Article 5 of the Constitution of the National Association of Building Owners and Managers provides that only members present at the meetings shall be entitled to vote, and

WHEREAS, it is usual that the number of members attending the Convention is a small proportion of the total membership of the Association, thus allowing a minority to vote for the majority, and

WHEREAS, the members who are unable to attend the Convention are thereby disfranchised;

BE IT THEREFORE RESOLVED, that this present condition be freely and openly discussed before the Convention with the view of establishing a plan permitting affiliated Associations to vote their full membership, whether present or not, giving active members the privilege of voting by proxy."

This calls for no vote. If this motion is carried, we simply discuss this question.

Under the Constitution, it is impossible for this convention to change any article of the Constitution. That must be done by the Board of Directors. The reason this motion is presented to you is simply so that you will know what is expected will be brought before the Board of Directors, and further, to find your opinion of it.

THE PRESIDENT: Free discussion can be entered into on the discussion of the motion on the floor. All the mover and seconder desire is a discussion on that particular resolution. After that, you can do what you like with the resolution.

The motion to take it off the table carried.

MR. THORPE: I will remind the members present that under the Constitution as at present, those of the members who attend a convention can pass resolutions which are binding upon the entire membership. I think it has been estimated at this convention we have about 10 per cent of the entire membership present. I ask if you think it is fair that 10 per cent of our membership should vote and change the entire policy of the Association without a vote of the members of the Association who are at home? That is the reason this has been presented.

FRED L. SWETLAND, Cleveland: It has been said this resolution was in favor of giving the majority a chance to voice their opinions. If there is any one system that has ever been devised by politicians to control conventions, it is the system of proxies. If you want to maintain yourselves in power in a mutual insurance company, you get proxies. Three or four men vote several hundred votes sometimes.

It seems to me the men who come to these conventions come because they are interested in the proceedings and in the organization or they would not be here. The convention has never limited the number of delegates. It was a question at the time of reorganization whether or not there wouldn't be too many members, and whether it would not be advisable to indicate from which organization a certain number of delegates would have the right to vote. That is usually done, as you know, in large organizations.

The resolution from New York was of course born in the action of the last convention which increased the dues from five to ten dollars. The New York members present at the convention were in favor of the motion and voted in favor of it. When they went back they had troubles with their local Association. I do not think any of the rest of us experienced those troubles at all. I am very much against the machinery which will put in the hands of a few men the control of a convention like this. I can probably get proxies enough to out-vote a lot of other people. Why should I, or anybody, have a right to vote proxies on a

question which the proxies know nothing of in advance? (Applause). They fear we will take some action the rest of our members will not approve.

EDWARD M. APPLEGARTH, San Francisco. The same question is facing the country at large today in the increasing tendency for initiative petitions—letting every citizen have his say in a question whether he understands it or not. The further we depart from the original basis of this government the worse off we will be. The same thing applies to this Association. Let the representatives—the men who attend—use their best judgment, understanding the question. If we were consistent with Mr. Thorpe's resolution and every United States senator could vote for the population he represents, where would the government of the United States be? It is unsound from a political as well as an economic standpoint.

THE PRESIDENT: The Constitution permits the Board of Directors to spend their money as they may elect. The membership not present as a rule have very little to say about it. There you place your confidence in a certain group of men.

COLONEL GORDON STRONG, Chicago: When Mr. Cushman two years ago started his remarkable membership campaign, that was the first time I ever heard about the National Association. Mr. Cushman wrote a series of very remarkable documents, some in telegraphic form, and they got there. In reply, I suggested to him I thought we were on the wrong track on the National Association—that instead of being an entirely separate group of individuals having no relation to the local associations at all, the National Association ought to be strictly a federation of local associations. I added that I thought those local associations should vote by the system of delegates—of proportionate representation the stronger associations to have more of a vote than the smaller which contributed less and had less property. I have not seen any occasion to reverse that view. I might have reversed it if it had not been for Mr. Swetland's eloquent remarks on the other side.

I quite agree with Mr. Swetland on the matter of proxies. I do not believe it should be the privilege of anybody who is energetic and enthusiastic, to send around to the cities not affiliated and gather up two hundred proxies. We have two hundred and fifty active members, and if someone wanted to he might get two hundred proxies and make quite a splash.

But as to delegates and proportionate representation, I am for it. If the National Association had one seat of government and always convened in the same place, and each local association could make its calculations to get a sufficient number of delegates at that place, it might be different. But as it is, the only way a city can have a voice at every convention proportionate to the dues it pays and the property it represents, is to have a

system of delegates, instructed or uninstructed, as they may choose to send them, and let them vote the full strength of the local association. The more who come, the better; but unless they can vote the strength of their association, a local association does not have the relative weight in the National Association to which I think it is entitled. (Applause).

J. L. ECKERSON, New York City: I rather dislike Mr. Swetland's remarks about the increase in dues he mentioned. I do not think that was the point at all. There may some question come up in which we cannot bind our local association. Some might say all the members should attend, but the New Yorkers are not as great travelers as our western friends are. I think the main point is we should not attempt to bind our entire membership at home until they have had an opportunity of at least talking over the matter and deciding whether they want it or not.

COLONEL STRONG: I should withdraw every statement I have made if the National Convention cannot bind the local associations at home. They can have their system of delegates and give them the right to vote for or against, but when the measure is passed, it must be binding.

ADRIEN W. VOLLMER, Philadelphia: I am in accord with Mr. Swetland's viewpoint. My opinion is this convention is all the more interesting because a small group from the smallest place can voice its sentiments. When we have a number of proxies it means one man gets a number of proxies from different people to vote in a certain way. He has possibly interviewed a number of people with reference to a particular question. When it comes up, he has committed himself. We had an illustration at this meeting of the lack of wisdom of committing yourself too far in advance. Colonel Strong had the courage to tell us he had an opposite view from Mr. Swetland. After he heard his remarks, he changed his viewpoint. We can get it across and the people are willing to listen to us. If they feel we are telling the truth, they are willing to be convinced. They are not tied body and soul with a lot of proxies. (Applause).

WILLIAM H. CLASS, New York City: I think these gentlemen should be taken behind the scenes a little bit. With your permission, I will do it. Those of the New York Association who have taken to the best of their ability an active part in the National Association work, have had it sold to us. We know the good in it. We know that New York City and the New York Association should be in this Association. The affiliation is of greater benefit to New York than it can ever be to the National, in our opinion. But we have a lot of hard ones back there who have never attended these conventions and do not realize the benefit to be derived from the affiliation.

Our real purpose for bringing this resolution before the National Association, was for those who might be said to have the

blood of the National Association in their veins. We want to save New York to the National Association, not for the benefit of the National Association, but honestly and truly for the benefit of New York. We are afraid if something radical might be done, that these men who are unenlightened about the National Association might object. We know it is good. For an illustration: A few years ago we had a financial problem before us. We were supposed to have settled it. We had to raise funds. It is simple for some individual man, an active member of this Association, to get on his feet and say, "I think the By-Laws of Association should be amended so that the dues may be fifty dollars a year." I personally believe that the New York delegates would be glad to pay into the National treasury fifty dollars a year in dues because of the benefits they have derived. But under the affiliated plan that is not possible. We would have to go back to New York, if such an amendment were passed, and attempt to get that out of our members.

That is the whole purpose of the thing. The method of doing it was suggested for the purpose of discussion. On a question of dues or representation or something in which each member of the Association is vitally interested, either in his pocket-book or otherwise, we think a referendum vote of the members of the Association should be taken. In that way we can go back and say, "The majority says you must pay fifty dollars." It is not for the purpose of running this Association, because New York does not want to run it.

DEAN VINCENT, Portland: In my opinion, the remarks advanced by the New York members are the very argument that should confirm our opinion in the present method, not only as against proxy voting, but as against enlarged powers by the local. This is a National Association. These men meet in the interests of the National Association, not in the interests of New York or Portland or Cleveland. Would you send the power to control the Association back to the men admittedly against us? You admit in one breath a large part of your New York Association is not even interested in the National, and a good many against it; still you want them to control the policies of this organization. (Applause).

MR. CLASS: I should like to ask one question of Mr. Vincent, with the permission of the Chair. Before you can educate a child, you must send him to school.

MR. VINCENT: Yes, but he does not pick his own books.

MR. CLASS: If the New York Association is not in the National, it is not being educated.

MR. SWETLAND: Education has been recognized as being absolutely essential to good citizenship. Having that fundamental recognition of the advantage of education, we make it compulsory. If they don't go to school they are arrested.

COLONEL STRONG: Is it a part of this resolution that the acts of the National Association in convention assembled shall be subject to referendum to the local associations?

VOICES: No.

COLONEL STRONG: Then why talk about it? Why raise the issue that these things must go back to the local associations to be approved? I should be violently opposed to that. This convention must be as competent to act as the Congress of the United States. They do not send their resolutions home to see whether they are right or not. They elect delegates in proportion to population. And the acts of those delegates stand.

THE PRESIDENT: I think the question is this group of Stay-at-Homes do not trust the men from all over this country.

COLONEL STRONG: The National Association is a perfectly proper example of representative government. The representatives must be competent to bind their associations at home. Is that the meaning of the New York resolution?

MR. CLASS: By a referendum vote I was only referring to questions of policy such as increase of dues between convention periods.

COLONEL STRONG: Is it your meaning the delegates shall be able to bind New York?

MR. CLASS: Most assuredly.

COLONEL STRONG: Then I am for it.

MR. APPLGARTH: That is not what the resolution says. If it said "representative" it would be all right. It says every man who belongs to this Association has a vote. He can give it to anybody he sees fit. You cannot do that in representative government. That is why I ask it be amended to make it read they consider a form of representative government, and you will get somewhere. We are talking at cross purposes.

VOICE: May we have the resolution read again?

MR. CLASS: It says to vote their full membership; it does not make any difference whether by proxies.

MR. VOLLMER: It seems to me the proxies are unfair to associations on the assessment basis. I am speaking from a personal interest and I have in mind several associations that are. Their representation might not be as large on that account, but it is stronger. You have on foot a movement to get your little associations on an assessment basis. What justice is there in confining these people to their assessment votes and letting some other associations that want to make their dues two dollars per year control this convention? I cannot see it. (Applause).

(Calls for question).

THE PRESIDENT: We have had a very liberal discussion on this question. I will ask New York to make a motion, the reso-

lution be withdrawn and the matter dropped so far as the convention is concerned, for the consideration of the incoming Board of Directors to continue as we are or change the policy as governed by certain remarks in this convention.

MR. CLASS: I will be perfectly willing to offer that as a motion, but I hardly see how it can be done that way.

I move the matter be referred to the Board of Directors.

The motion was seconded by Mr. Holbrook and carried unanimously.

THE PRESIDENT: May we have some information from Mr. Horine as to the Southern Conference?

The Southern Conference

E. M. HORINE, Atlanta: Mr. President and Gentlemen: I do not know much about the Southern Conference. It has just been born and we hope for great things in the future by this grouping of the southern cities, and I mean by that almost all of the cities south of the Ohio River.

During the last year three cities have been organized—New Orleans, Memphis, and San Antonio. When we get back to our homes we are going to take some action that will mean the organization of as many of the southern cities as we possibly can get in. We have appointed as directors members from nearly all of the cities that have been represented here at this convention. We are hoping for splendid results from the conference. I do not know that I can give you any further detail of that. (Applause).

CORBIN M. DUNCAN, Little Rock: Mr. Horine failed to announce he has been elected President of the Southern Conference and success is assured by his election and the election of Fred M. Shaefer of Atlanta as Secretary. (Applause.)

The Ohio Conference

CAPTAIN MCINTYRE, Cincinnati: The Ohio building owners and managers had a conference day before yesterday at dinner, at which the following resolution was passed:

RESOLVED, That the Ohio Building Owners and Managers Association will undertake to organize local associations of building owners and managers where no such organization at present exists, such associations to be organized on the property representation plan with the budget provided through assessment basis on the value of property represented; and be it further

RESOLVED, in order that it may provide the funds necessary for such work, that this meeting earnestly recommends to the local associations of the Ohio Association of Building Owners

and Managers that an assessment of one-half cent per one thousand dollars of valuation be levied against the members' property of such associations in the state of Ohio.
(Applause).

California Congress

RAE T. SMITH, San Francisco: Last night the delegates from San Francisco and Los Angeles got together and decided to hold a California Congress. (Applause).

Report of Membership Committee

Paul Robertson, Indianapolis, Chairman

The work of your Membership Committee more or less dovetails in with that of the committee on local associations, so I trust we may be excused if we appear to be stealing some of their thunder. We scare up a good part of the game that they shoot. In a way we blaze the trail.

When our books closed on last year's membership work we had 1,206 members. We now have 1,340, a gain of 134. Thirty-eight of these represent the gain in active members and the rest have come in through the affiliated route.

The result has been accomplished through the use of a mailing list of about 1,500 names which we feel is of considerable value for future use and to which we have forwarded eight circular letters, spread over a period of several months. No one who has not gone through it can appreciate the amount of work involved both in compiling the list and getting out the letters, and too much credit cannot be given Mr. Ermeling and the executive office for their part in it, for they did most of the work.

The cost has been approximately \$500.00.

PAUL ROBERTSON, Indianapolis, Chairman.

W. H. Ballard, Boston.	John Lewis, Birmingham.
R. E. Barber, Pittsburgh.	T. H. Lynch, New Orleans.
Fred B. Bourland, Peoria.	J. A. Martin, Spokane.
Thomas Bradley, Washington.	J. B. Van Nuys, Los Angeles.
Fred W. Buck, Duluth.	George Randolph, Memphis.
Robert S. Carroll, Bucyrus.	Jonathan Rogers, Vancouver.

Committee on Local Associations

Ell. Torrance, Jr., Minneapolis



Your President delegated to the third Vice President this year the task of organizing and securing the affiliation of Local Associations and the results have not been entirely satisfactory but the foundation has been laid and a way discovered to conduct this work that should bring future success.

Groups of Building Managers in twenty-seven cities in the United States and two Canadian cities were first solicited by correspondence and from this field two affiliations were secured.

Through the personal efforts of Mr. Dean Vincent who addressed the Spokane Association an application for admission was made by that organization but later withdrawn on account of local conditions.

Mr. Robertson brought Indianapolis into line with the organization and affiliation of a strong local association in that city.

It became apparent that this work could most properly be carried on by personal solicitation and as a consequence Mr. E. M. Horine attended a meeting of a group of Building Owners and Managers at Memphis during March and sent back very encouraging reports from this field. It was the opinion of your Executive Committee that this form of personal solicitation was the most practical method to follow and preparation was therefore made for Mr. Ermeling to swing around a circuit including St. Louis, Memphis, New Orleans, San Antonio, Dallas and Kansas City. This program was carried out during the month of April and has resulted I am pleased to report in the local organization affiliating at Memphis, and New Orleans and the forming of an Association at San Antonio.

The net results of the year's work find us with an increase in affiliated Associations of 20%, there now being 27 cities represented on our roster by affiliated associations as against 22 at the commencement of the last administration.

There are many bright spots on the horizon, for such cities as Boston, Philadelphia, Kansas City, Des Moines, Peoria, Spokane, Tacoma, Columbus, Toledo and others will undoubtedly write their names on the list of affiliated cities during this next year.

I wish to incorporate herewith the dates of affiliation of the following associations:

Louisville, October 14th, 1921.

Oakland, November 4th, 1921.

Indianapolis, December 5th, 1921.

Memphis, May 4th, 1922.

New Orleans, May 10th, 1922.

Respectfully submitted,

ELL. TORRANCE, JR.,

Third Vice President.

THE PRESIDENT: As our membership grows, the interest should increase in more than a direct proportion. It should go on an ascending scale—two straight lines and the curve goes up.

Report of Auditing Committee

To The President, Board of Directors and Members
National Association of Building Owners and Managers,
Fifteenth Annual Convention,
Bedford Springs Hotel, Penna.

Gentlemen:



The undersigned representing the Auditing Committee appointed by President Coley hereby beg to report that they have examined on this day the books and records of the Treasurer, Lee Thompson Smith, for the fiscal year ending May 31, 1922, and that they find them to be correct.

They also wish to take this opportunity of complimenting Treasurer Smith upon the careful and comprehensive presentation of his report, which shows a great amount of painstaking work on his part throughout the year.

Respectfully submitted,

W. H. BALLARD,

CHARLES S. HOLBROOK,

Chairman.

Report of Committee on Finance

Dean Vincent, Chairman, Portland, Oregon.

As you all know, a resolution was passed at the Portland convention asking for a voluntary assessment of one cent per thousand dollars. Letters were sent to the various members of the Association from time to time, and a little over \$6,000 was raised by this method. Payments were made by 575 members of the Association—approximately 50 per cent—which I feel is an indication of loyalty on the part of the membership.

There has been a good deal of discussion in the Board of Directors in regard to the proper methods of finance for this organization. We need more money. There are two or three plans under which this may be obtained: an increase in dues, which the Directors do not feel would be wise at this time; under the assessment basis according to prorated values, which does not seem proper at this time, which practically leaves the best plan of asking for another voluntary assessment. I do not know whether it is your purpose to have me offer that resolution, or whether it should come through the regular routine.

THE PRESIDENT: The resolution passed by the Board of Directors was that the present Board recommends to this convention that it in turn authorize to the new Board a certain plan of financing the Association. Mr. Swetland has a copy of the exact resolution passed by the Board.

RESOLUTION OF THE BOARD OF DIRECTORS

MR. SWETLAND: After considerable discussion as to the methods of financing the National Association for the coming year, or until the next convention date, Mr. W. A. Avery moved the adoption of the following resolution:

RESOLVED, That the Directors recommend to the convention that the incoming Board of Directors be authorized to levy against all properties represented through the membership of the National Association of Building Owners and Managers, whether such representation is by individuals or through affiliated local Associations, an assessment not to exceed one cent (1c) per thousand dollars on the total land and building valuation of such properties, it being understood that for the purpose of such levy, the full tax list value be used; and,

Further, that the amount of such assessment be not less than five dollars (\$5.00) for each property represented except that such minimum shall be waived in the case of such properties as pay their assessments through affiliated associations, provided such associations pay the total amount of the assessment levied against all the properties represented in their membership.

The motion was seconded by F. L. Swetland and upon being put was carried, all of the Directors present voting aye.

THE PRESIDENT: The recommendation is that we authorize the Board of Directors to levy a general assessment of the members of not to exceed one cent per thousand dollars, with a minimum of five dollars, which would not apply where a local association pays in full for its membership.

The adoption of this resolution was moved, seconded and carried unanimously.

THE PRESIDENT: Gentlemen, we have now ended the program of this year. Our committees have reported to you the results of their activities. I think without exception every committee has shown progress. A great deal of foundation work had to be done before any progress could be shown.

When you imposed upon me the presidency of your Association, I realized it was a great responsibility and that responsibility would be very hard to carry out in this National Association with its widely separated membership. But through correspondence and by organizations, through committee work, through the help of local associations and through the wonderful co-operation given by the able minds on the Board of Directors, we have accomplished what you have heard. We come together at the conclusion of our year in convention. In order that the convention might be instructive as well as entertaining, we planned this week's program for this isolated hotel.

For the co-operation the members and the ladies and all of our guests have given Mr. Monville in conducting the entertainment, and for myself, I thank you, and appreciate the co-operation exceedingly. (Applause.)

Election of Officers

PRESIDENT

THE PRESIDENT: We will now proceed to the election of officers for the coming year. In accordance with the Constitution, you heard the nomination of Earle Shultz of Chicago for President made the day before election. Are there any other nominations for President?

It was moved the nominations be closed.

The motion was seconded and carried.

W. I. LEWIS, Cleveland: I move the Secretary be instructed to cast one vote for Earle Shultz, the regular nominee of the Nominating Committee, for President for the ensuing year.

The motion was seconded by Mr. Louis T. Clark, of Los Angeles, and carried by rising vote, amid applause, and calls for speech.

PRESIDENT-ELECT SHULTZ: Ladies and Gentlemen: I am sure I am very appreciative of the honor bestowed upon me by being chosen as your leader for the coming year. I am also very sensitive of the responsibility and the importance of the task imposed, and I feel it will only be successfully accomplished through a continuance of the splendid co-operation which has been evidenced in the work of the Association during the past year. All I have to say at this time is to ask you to continue this co-operation. I thank you very much. (Applause.)

FIRST VICE-PRESIDENT

THE PRESIDENT: Mr. Lee T. Smith of New York has been nominated for First Vice-President. Are there any other nominations for First Vice-President?

It was moved the nominations for First Vice-President be closed.

The motion prevailed.

It was moved the Secretary be instructed to cast the unanimous ballot for the convention for Lee T. Smith, Sr., for First Vice-President of the Association.

The motion was carried by a rising vote, amid applause.
(Calls for speech.)

VICE-PRESIDENT-ELECT SMITH: I had it all written out, but Earle Shultz swiped my minutes. I do appreciate this courtesy and want to voice what our newly elected President said about co-operation. Your officers can do nothing without your help. I thank you not only on behalf of Lee T. Smith, Sr., but when I tell Junior about it, he is going to be tickled as much as I am. (Applause.)

EX-PRESIDENT COLEY: I would like to take up something I omitted. I will ask Mrs. Earle Shultz to come forward and take this seat on the platform. (Applause, audience rising.) I think this is very necessary, because I am sure Mr. Shultz will be totally unable to serve as we expect him to without the co-operation of Mrs. Shultz. (Applause.)

SECOND VICE-PRESIDENT

Mr. Paul Robertson of Indianapolis has been nominated for the office of Second Vice-President.

There being no other nominations, it was moved the nominations be closed and the Secretary instructed to cast the ballot for Paul Robertson as Second Vice-President for the coming year.

The motion was seconded and carried by rising vote, amid applause.

(Calls for speech.)

PAUL ROBERTSON, Indianapolis: Of course I appreciate very much this honor and thank you for it. I am not so sure about it all, however, because when the Official Scout of the Nominating Committee came to me and told me of this and said, "Will you accept it?" after I thought I had hesitated long enough for due modesty, I said "Yes," and right quickly he grabbed my hand and said "Thank you!" (Laughter and applause.)

EX-PRESIDENT COLEY: Our experience in the past in electing officers for this Association is invariably they have been men who have performed signal service for the benefit of this Association. I call that to your attention so that if any body has an ambition to be an officer, all he has to do is to get busy on some committee and produce results.

THIRD VICE-PRESIDENT

Mr. Isaac T. Cook of St. Louis has been nominated for the office of Third Vice-President.

There being no other nominations, it was moved the nominations be closed, and the Secretary instructed to cast one ballot for Mr. Isaac T. Cook for Third Vice-President.

The motion was seconded and carried, amid applause. Mr. Cook being absent, the convention had to forego the pleasure of his speech of acceptance.

TREASURER

Mr. William M. MacLachlan of Detroit has been nominated for the office of Treasurer.

There being no other nominations, the ballot was declared closed, and the Secretary instructed to cast one vote for W. M. MacLachlan, of Detroit, the regular nominee for Treasurer of the Association for the ensuing year.

The motion was seconded and carried by rising vote, amid applause and calls for speech.

TREASURER-ELECT MACLACHLAN: Ladies and Gentlemen: I certainly appreciate the singular honor, and as our newly elected President and First Vice-President said, the best way to get results out of this Association is through your co-operation. I am going to be the fellow who knows how closely you co-operate. (Applause.)

CORPORATE SECRETARY

Mr. Howard G. Loomis of Omaha has been nominated for the office of Corporate Secretary.

There being no other nominations, it was moved the ballot be declared closed and the First Vice-President be instructed to cast the unanimous ballot of the convention for Howard G. Loomis, of Omaha, as Corporate Secretary for the ensuing year.

The motion was seconded and carried by rising vote, amid applause.

(Calls for speech.)

HOWARD G. LOOMIS, Omaha: Mr. President and members of the National Association of Building Owners and Managers: I want to thank you for the confidence you have indicated in your present Secretary. I appreciate the good will that is expressed here. (Applause.)

EX-PRESIDENT COLEY: I now resign the chair in favor of our newly elected President.

PRESIDENT SHULTZ: There is still one order of business to be taken up, and that is the amendment to the Constitution providing for the election of directors and for the addition of the past presidents on the Board of Directors.

MR. VINCENT (reads): "The government of the Association shall be vested in a Board of Directors consisting of the officers, the past presidents of the Association, and five members of the Association who shall be elected by the members. They shall have the power to incur expense necessary for conducting the business of the Association, but such power shall be limited to an amount which does not exceed the cash in the hands of the Treasurer and not otherwise appropriated."

I move its adoption.

The motion was seconded.

MR. VINCENT: It was the feeling of many members of the Association that a President should not drop out of active association work the minute his term expired. He probably is better posted than any member and it is too bad to lose his services. How far back we should go has been discussed thoroughly. It was felt it might become burdensome, but that we might try it out until it proved burdensome, and then we could limit it to a certain number of years.

MR. COLEY: Heretofore the presidents have had the privilege of selecting from the membership at large certain men who in their opinion would co-operate with them and formulate the policies of this Association. If you pass this as read, the President has no power vested in him to appoint anybody. The convention must elect everybody. Therefore, if the President knows a particular man unusually qualified to serve on the directorate, that privilege the President has always enjoyed in the past will be taken away. I want to emphasize that point.

CAPTAIN MCINTYRE: Do I understand the past presidents have the voting power on the Board of Directors?

MR. VINCENT: Yes.

CAPTAIN MCINTYRE: Does the majority rule, or the majority of officers and Board members control the meeting, irrespective of the number at the meeting?

THE PRESIDENT: The Constitution provides a quorum shall be five members.

MR. VINCENT: I agree with what Mr. Coley indicated. I did not agree with that part of the motion, but I offered it inasmuch as it was the action of the Directors.

THE PRESIDENT: The purpose of the election of the directors is to conform to the strict legal requirements of the laws of the State of Illinois. There is a question whether a co-operative organization not for profit must necessarily elect its directors. To be absolutely sure, we felt we had better elect them.

CHARLES E. DOTY, Cleveland: What obligation does this impose upon past presidents? Do they have to sit at the head tables at banquets? (Laughter.) If so, I am strenuously opposed.

(Cries of "Sit down!")

MR. SWETLAND: I am very much opposed to that procedure unless it is compulsory. I think the incoming President should have the right and opportunity of selecting the men whom he thinks will best aid him in the performance of his duties during his administration. As a matter of fact, the Nominating Committee consulted with the President-elect as to the directors; but I do not know what the next Nominating Committee will do. It seems to me this matter might just as well rest for the present year as not. I being one of the presidents, of course, am going to throw myself out of office; but I should like to see the motion tabled to allow a further opportunity of ascertaining whether or not we must elect our directors. We might change next year.

(Calls for question.)

MEMBER: I do not think there is any reason to lose the value of the past presidents while waiting to find whether the five members must be elected. Pass the resolution and then investigate. I think we should have the members on the Board.

COLONEL STRONG: I was again going to be silent, but as Mr. Swetland spoke, I am compelled to address it on the opposite sense. My conception is the members of the corporation elect a body who are to represent them in the functions of that organization. I think it is up to the membership at large to elect their directors. It should be a representative system from the foundation up through the Board of Directors. I approve heartily the resolution whether it is really necessary under the laws of

Illinois or not; and I have been convinced by a good attorney that it is.

MR. DOTY: I should like to ask Mr. Smith how much greater would our deficit be this year if we elect to the Board of Directors these five additional past presidents and sent them to the directors' meeting at a terrible expense?

LEE T. SMITH: We elect you as members and expect you to come, but if my successor is careful, he might be able to audit your bill.

MR. DOTY: I move the resolution be tabled.

The motion did not receive a second.

The President then put the motion as stated by Mr. Vincent, which carried.

MEMBERS OF BOARD OF DIRECTORS

THE PRESIDENT: The following names have been submitted by the Nominating Committee for your approval as members of the Board of Directors for the ensuing year:

Waldo A. Avery, Detroit.

E. M. Horine, Atlanta.

E. Everett Thorpe, New York.

J. C. O'Callaghan, Philadelphia.

Roy J. Kinnear, Seattle.

COLONEL STRONG: The Nominating Committee did not nominate Mr. Kinnear, and at the termination of its proceedings they deposed the Chairman in view of the fact his action getting on the Nominating Committee was a miserable crawl. The entire Nominating Committee with the exception of the deposed Chairman recommend Mr. Vincent for director for the coming year. (Applause.)

It was moved the name of Dean Vincent of Portland be substituted for that of Roy J. Kinnear, of Seattle, in the Committee's report.

The motion was seconded and carried.

It was moved the nominations be closed.

The motion prevailed.

It was then moved the Secretary be instructed to cast the unanimous ballot of the convention for the list as amended for members of the Board of Directors for the ensuing year.

The motion was seconded and carried amid applause.

(Calls for speech.)

WALDO A. AVERY, Detroit: Mr. President and Gentlemen: I have never been able to understand by what miracle

I have been put on this Board, except by being silent, and I do not want to spoil it. (Applause.)

E. M. HORINE, Atlanta: I am in very much the same position as Mr. Avery. I do not know, except possibly to have somebody from the South. I will do the best I can for you and will attend the meetings as in the past whenever the Board meets. (Applause.)

E. EVERETT THORPE, New York City: I do know one reason why I have been put on the Board. I was told by the Chairman of the Nominating Committee I was put on representing the Apartment House interests. I believe that was the reason. Another reason is we are all fat men and they want to make it unanimous. I thank you very much for the honor you have given me. (Applause.)

J. C. O'CALLAGHAN, Philadelphia: As Mr. Thorpe said, they wanted to carry out a line of symmetry in this thing, and they noticed my waist line. That is the only reason I can see why I have been signally honored. I want to thank you. (Applause.)

THE PRESIDENT: I now take pleasure in calling on the last member of the Beef Trust. (Laughter.)

DEAN VINCENT, Portland: This is real enlightenment to find out why they insisted I go on the Board of Directors. I appreciate the courtesy but question your judgment. I thank you. (Applause.)

THE PRESIDENT: I am sure we would be glad to hear a few words from our Executive Secretary.

LEWIS B. ERMELING, Chicago:

The work of the Association office at times is rather questionable so far as the interest of the members is concerned. I assume when nothing is heard from our members about what we are doing, it is going all right. Whether I am right or not in that assumption is debateable. The Association office, as I tried to outline in my brief report yesterday, is organized to protect the interests of our members. I think if I can just impress upon the members of the Association that my services are at your disposal—at your direction—and that I am at all times awaiting your instructions, then it is up to you to give me the orders. (Applause.)

W. I. LEWIS, Cleveland: I would like to move a rising vote of thanks to ex-President Coley for his activities in behalf of the Association during the last year.

The motion was seconded and carried by rising vote, amid applause.

MR. LEWIS: I would like to extend a vote of thanks to those who worked with him during the past year.

The motion was seconded and carried by rising vote, amid applause.

LEE T. SMITH, SR.: We had a courteous invitation from Los Angeles for the next Convention. I move we return a vote of thanks to Los Angeles and our regrets we find it impossible to go there next year.

The motion was seconded and carried.

LOUIS T. CLARK, Los Angeles: I would like to add a few words. Although we would like to have had you there next year, we will look forward to the following year—1924. (Applause.)

MR. HORINE: I move that we adjourn.

The motion was seconded and carried and the Fifteenth Annual Convention of the National Association of Building Owners and Managers declared adjourned, *sine die*.

Advertising and Selling Space

LIVE-TOPIC BREAKFAST CONFERENCE

June 20, 1922

Mr. J. Clydesdale Cushman, of New York City, presided over the Tuesday morning Breakfast Conference, which met in the main dining-room of Bedford Springs Hotel.

CHAIRMAN CUSHMAN: For those who have never attended these breakfast conferences, I will say there is no regular program and no set speeches. We are gathered in an informal way to discuss briefly the subject we have to consider.

There is in this room a man who owns a choice corner plot in a large city. He proposes to erect on this site a very large building. The man who is going to manage that building is also here. There is also present a man who recently erected a large building and is trying to fill it with tenants. The manager of that building is also here. There is also a man here who owns an old building. It is a large one and well managed by a man who is also here; but unfortunately, their particular old building is shortly to be vacated by some important tenants who are moving out because of the change in that particular center, or because of an undesirable change in the general character of the neighborhood. They own and manage both business and residential property. Each one of the men I have mentioned is thinking right now more about advertising and selling space—the subject of this conference—than about saving and operating expenses.



Here are some of the things they must consider: Floor plans, booklets, selection of the class of tenants, the question of whether they shall put renting men on the premises; whether they shall conduct a personal canvass by renting men in other buildings, or whether they shall conduct their canvass by mail. If so, it is to be determined whether they shall send out mimeographed letters, "Hooven" letters, letters typewritten by hand, or other forms of greetings, to prospective tenants. They are going to consider the question of whether they shall advertise in the newspapers. When that question comes up it will also bring up the question as to whether it is to be general publicity, or newspaper advertising offering specific space. There is also another medium—that of magazine advertising.

One of the most popular forms, and one that most men consider, is the question of sign boards on the buildings. Before the building goes up they must consider the question of bridge signs that cover the sidewalk. Many cities require the sidewalk to be covered by a substantial bridge to protect pedestrians from injury. It is a good medium of advertising because it costs nothing.

Then there are public billboards along the lines of railroads and trolleys and public highways.

If the office of the owner or agent be located on the ground floor, there is the question of window displays.

There is also another very important question to be considered—the obtaining of free publicity and securing the co-operation of the newspaper editors in their respective cities. Then comes the final and all-important matter of following up the “leads” or inquiries they have received at their office, from prospective tenants before the building is built.

I have made a memorandum of a few men on whom I am going to call with the view that they may “start something.” I know some of them will. They have nothing in mind, but I know they will “start something,” because they have a reputation of doing that. I have selected them also for the reason that they have been, or are going through, phases of which I have already spoken. I do not ask any man to stick to any one subject except that it be on the topic of “Advertising and Selling Space.” We do not want to discuss operating methods. I will ask I. T. Cook to tell us how he did it in the Arcade Building in St. Louis. (Applause).

I. T. COOK, St. Louis: The old saying that advertising will sell anything applies to an office building, to my mind, the same as to any merchandising commodity.

In the Arcade Building, we had the problem of filling both shop space and office space. The ground floor of the building and seven other floors are devoted exclusively to shops. It was something of an educational problem for St. Louis so far as shops on the upper floors are concerned. I made an estimate in connection with the cost of the building as to how much we should spend for advertising. I believe an office building enterprise or any other commercial building of any size or magnitude—in fact, almost any building—should set aside a percentage of the cost with which to advertise the property. The Arcade Building cost something like four million dollars. We have spent approximately eighteen or twenty thousand dollars in advertising, up to this time. We tried newspapers, booklets, floor plans, billboards, and almost all the methods mentioned by Mr. Cushman.

I think the most important thing in advertising a new building—a building which is to be erected or under construction—is the selection of a good building manager first. (Applause). After the building manager is selected, confer with him and get out

booklets of floor plans with a small amount of descriptive matter so that the booklet will not be laden with a lot of things the prospective tenant will not read. After a carefully selected mailing list has been obtained send them an announcement that the booklets will be sent, or that at the request of the prospective tenant an agent will be sent to the prospect.

In the Arcade Building we found good results from billboards on prominent corners where the traffic was heavy. We could trace a great many inquiries and interest in our building from that source. But taking the most important method with which to fill any building—whether it is new or an old building that has been remodeled—I believe the building should be in charge of a wide-awake manager, or if an agency office is managing the property, it should have a good man on the premises. If a large building, he should be a man of large caliber, who is intelligent, and devotes his entire time to thinking of his vacant space and having the operating manager keep the building clean, especially the vacant offices. Even more attention should be paid to them than to the offices that are occupied. His whole thought should be: "Will this man who is in some building which does not suit his business as well as mine, be interested in my building? I will send him a letter. If interested, I will call upon him."

But I am opposed myself to what is termed soliciting, or going to other properties and making a personal canvass of the property for the purpose of filling your own building. (Applause). Such methods in the end will only be a detriment to your property, rather than a benefit.

Newspaper advertising in a dignified way is effective. I think it is a mistake to advertise that you have a great many vacancies in a "going" property. In the first place, it gives a bad impression to the renting public. The man who is considering changing his location will say, "I do not want to go into that building. It is one-half vacant. It is not popular." With a new building or one under construction, you can be more prolific in your advertising. You can herald your wants to the public more fully than in advertising a building that has been under operation for quite a while.

After all, the most effective method, I am sure, is through an intelligent building manager to direct the campaign of advertising; and this is best done, to my mind, by that man calling upon prospects after he has thoroughly thought it out. If he has two thousand square feet of space vacant, or five or ten thousand, or even two hundred thousand, he should think of some tenant in some place, especially of a property which is not up-to-date, or in a building that is not an office building, where he can convince a man he could move into an office building and have his business taken care of better. Then send him a letter, and if he hears from him—call. If he does not hear, call around with a little friendly greeting and ask if he has received his let-

ter, and discuss the subject. If the man is interested, immediately show your floor plans and particular space. If he isn't, make an effort to interest him. If you can't, pass to some one else.

I think in the planning of the building, the building manager should be called with the architect when the preliminary plans are made. If you have space which is lighted and ventilated, in a good location, you will not have much trouble filling your building if a reasonable campaign along the lines I have suggested is pursued.

With reference to a building twenty or twenty-five years old—a building that is fireproof—I think you should where possible, add plumbing such as lavatories in each office, the building to be thoroughly renovated. Good paint does more to make an old building look well than anything else you can do at a moderate cost.

If I were to attempt to tenant a property of that class, I would put it in good condition and then invite people to see it; and regardless of the size of the building, I would have an intelligent manager on the premises. If it is a building of 150,000 square feet or more, I would have a man who is capable of handling almost any one who should inquire for space. In a smaller building, I would have the prospects referred to my office. (Applause).

D. M. ROWE, Dayton: According to our Code of Ethics, we should not solicit tenants from any building manager by a member of the Association. I should like to ask the gentleman what is the difference between sending a letter or a booklet to such a tenant, or calling there in person? It is soliciting. The minute you send him a letter inviting him to come to your building you are soliciting him and it is "raiding" a member's building. If it is not managed by a member of the Association, that is all right; but if it is, it is all wrong—just as wrong to send a letter as to go in person. (Applause).

MR. COOK: I think the sending of a letter to a man who is evidently not so well located, or a man who has at some time made inquiries of you for space—and the man who manages a large number of buildings should have on file all the inquiries, whether made this year, last year or the year before—is a legitimate practice. If a man must confine himself to where he cannot be in competition with another building manager in a legitimate way, as to keeping a more modern building or one under better management—we will assume we all manage the space in the same way—I do not see how he is going to conduct a campaign to secure tenants successfully.

It will be obvious to you or any other manager that a certain tenant is not well located. If you have a lot of vacant space, I think you have a right to send out and ask if he is interested in moving. If you receive no response, drop the subject. I think

what is termed "raiding" a building is conceded making a strenuous campaign of any building by a personal canvass from room to room. I make a distinction between doing that and sending out letters such as I have described. I think you have a right to make inquiry whether a man is considering removing his office.

MR. ROWE: If the tenant has first indicated to a man he wants to move he has a right to go to him and talk about coming into his building. But if he initiates the idea and starts dissatisfaction, he is doing a wrong thing—I do not care whether he sends a letter or goes himself. (Applause).

THE CHAIRMAN: The question of filling a building is a very serious one to the man whose pocketbook is affected. I happen to know of a building that is costing a man over \$1,500 a day every day he does not fill that building. It becomes an important thing in his mind as to what he is going to do with it. What shall he do? Let the building lie there until somebody walks in? He must fill that building. You pretty nearly have to go out and seek tenants if none come to see you.

To touch on the Code of Ethics adopted by the National Association, I will read the second paragraph in the introduction: "The National Association Code of Ethics was prepared to serve as a guide to active members in cities without local associations, and as a model form for cities with local associations which had not adopted a local Code of Ethics as specific as this one."

In order to get a more diversified view on this subject, I will call on Jack Williams. I have heard a lot about him from those on the train from New York to Bedford Springs. He is from San Francisco. I understand the company he represents sells everything.

J. B. WILLIAMS, San Francisco: In the renting of two very small buildings, it has not become necessary for me to do any advertising under any of the methods of which Mr. Cushman has spoken. Most of my renting has been done by personal contact. I have never gone into another man's building and solicited a tenant in the building, but I would meet him on the street and ask him. (Laughter). Meeting a man on the street or at the club, I would approach him as to how he was suited and how he was getting along, the tenure of his lease, etc. I made a memorandum, and when the time arrived, I was on the spot to encourage him a little bit, of course. I really can't explain to you just how I did the thing, excepting that I keep track of the man who is renting space, and whenever he needs space I know he needs it, and try to sell him what I have; that's all. I do no advertising whatsoever.

DEAN VINCENT, Portland: I did not intend to enter into this discussion of advertising, but inasmuch as the Code of Ethics has been touched upon, I wish to say a word. In my opinion, every building in the United States for which there is a legiti-

mate need, can be filled by legitimate advertising. Soliciting tenants from other buildings is not legitimate advertising. (Applause).

If a man is losing \$1,500 a day on vacant space in his building and it is being advertised in a legitimate way, it proves he was a d—d fool to build the building. (Applause). Just because a man is a fool is no reason for making the owners of other buildings suffer. I believe every building for which there is a reasonable need can be filled by legitimate methods—advertising in a general way, not in a personal, specific way. (Applause).

MR. COOK: I do not want to monopolize the time of this conference, but I think if a building is well managed, you need not fear losing your tenants. They will stay with you if it is well managed.

If an owner is prodding you all the time because he has vacant space, you will simply have to get out in competition with other property and try to obtain tenants. I believe I am more opposed to "raiding" than any man in the country. We handle quite a few buildings and never have been compelled by the pressure of owners to "raid" another man's property. But we do keep on the job all the time, and through the different properties we have we are enabled to know about most of the people who are seeking space. If he seeks space, we certainly will try to rent him. If he is not seeking the space, we will, by legitimate advertising, either by billboards or meeting him "at the club or on the street," acquaint him with the fact we would like to have him as a tenant in our property, either because he is a personal friend, or because of his business he would make a desirable tenant.

One of the most important means of keeping a building tenanted is the selection of the tenants—a certain class of tenants to occupy a certain location in a city or certain types of buildings. Your building may be designed with offices twenty-five to thirty feet from the corridor line. One class of tenants can occupy that much better than another. If of shallow depth, another class can use that. It must be intelligent application of the brain of the building manager or real estate concern to the whole problem—whether billboard or newspaper advertising.

Any man who is in business or has a building has a right to a return upon his property. After that return he has a right to a small profit, for the labor he puts in taking care of it. The law of supply and demand will eventually take care of foolish people who will erect a building because they want to erect a monument, or because they hear office buildings are paying 8 or 10 per cent. I do not believe there are many office buildings that have paid that much for the last few years. The cost of the property, in whatever period it may be built, will work to take care

of the foolish man. A well managed property will hold the tenant, whether it is small or large, so long as he can get along with the space available.

RAE T. SMITH, San Francisco: I recently filled a 15-story building by advertising in the newspapers and in the weekly papers. Several firms opened up their mailing lists to us. We do not solicit anyone except on inquiry from that folder. We had no trouble in filling the building. In San Francisco we had a great demand at that time for space. We did not try to "raid" anybody's building and did not make much effect on the supply in San Francisco.

JOHN H. HALL, Cincinnati: I think Captain McIntyre can tell you something about Mr. ———.

CAPT. M. W. MCINTYRE: What Mr. Hall wants me to speak on is the question of canvassing other buildings. Mr. ——— came upon the ground in the ——— Building. He is very fair in the question of determining the amount of rent that shall be charged. He took it up with the Association with an idea to make a profit to that building. He assures us of the fact he will not depreciate his building or an office by lowering the rents. As president of the local Association and chairman of the Grievance Committee, when Mr. ——— started four or five people out to canvass the office building from room to room, I was immediately appraised of the fact. I saw Mr. ——— and he took the men off the canvass. He then started advertising through the newspaper medium. At the present time the building is about half rented. The other building that went up at the same time is about three-quarters rented. Practically all the buildings in Cincinnati are fully rented, so it is only a question of time when, by going after it in the right way, his building will be filled. Everyone of the managers in Cincinnati is now assisting Mr. ——— or co-operating with him to rent his building.

When a person comes into any of the offices, we immediately suggest certain space in the ——— Building where a man can be suited for any space necessary for his needs. (Applause.) In fact, I had two tenants in the building, each occupying over 2,500 feet. They wanted more space. I suggested to both that the ——— Building would satisfy their needs for the increased space. I saw a way I could help myself also by expanding within the building, for the space they vacated was 5,000 feet (Applause).

GUY H. WRIGHT, St. Louis: I would like to ask if there are any associations that list their vacancies with the Secretary or with one individual in order to help out the various buildings and the prospective tenant without running all over the city for space?

I want to bring up the question of salesmanship—something I have noticed with tenants. Very often when times were such

as they were when everyone was a scavenger, we would take the tenant's word that another building offered space at such and such a figure. I think it is a good plan for each manager to get the floor plan of his competitor. When this tenant makes the statement, have him show you in what rooms it is, because very likely he is quoting bad space against good space. I have done that as far as I can.

CAPTAIN MCINTYRE: I will say for the Cincinnati Association, information about a vacancy is given the Secretary. A special bulletin is gotten out once a month appraising each of the office buildings the amount of space vacant in the other man's building and the cost of that space, so that when a man comes into your office or mine and you have a space that is worth \$150, and he says, "I can only pay \$35 or \$40," you name the buildings that can offer such space. That goes through the bulletin. The information is handled by the Secretary. It works out nicely and assures the men you are co-operating with each other. It has stabilized conditions and everything is ethical all the way through.

THE CHAIRMAN: In some cities, I think you realize, there are a great many hungry brokers looking for commissions to keep the wolf from the door. In other cities there are no brokers, or might as well be none, for they are refused commissions on the part of the owners or managers of buildings. Mr. Sayer, I think, can throw light on the subject of how they do not pay commissions to brokers, and list empty space among their association members.

JAMES J. SAYER, Portland: We believe the Portland Association has offered a considerable service to the public generally seeking space, and to the members, through its plan. We send out monthly blanks for the members to make returns of their vacancies, and that blank calls for the type of vacancy—whether it is in single rooms or in suites of two to five rooms. For the past two years we have had vacancies running from $1\frac{1}{2}$ to $2\frac{1}{2}$ per cent, which is very small.

The service to the public has been this: When a member cannot immediately accommodate an applicant for space, he sends this information to the Secretary. I have been able through the records in my office immediately to mention one, two or three buildings where the tenant might be located.

We have passed, by unanimous action of the Association, a special agreement not to pay commissions to brokers for space above the first floor. It was passed at almost a full meeting. Those not present eventually signed it.

The Secretary's office is always open to inquirers for space, and has this information available. (Applause).

THE CHAIRMAN: In visiting Boston recently, I dropped in to see my good friend Ballard, and he showed me an unique method by which they lease vacant space in their buildings. In

Boston they pay commissions to brokers. I would like to have that side of the question discussed.

W. H. BALLARD, Boston: I represent a general agency where we do both a broker's business and a building manager's business. After we had reached the point in Boston where we placed a ban on brokers, I do not know if there was a great deal of office renting done by brokers, but it is still worth while to split commissions.

On the whole general subject of advertising, I think we must realize, while we have been helping ourselves to a little information this morning, the whole question is more or less hypothetical. What is good for Jim is not for Jack. We must meet our local conditions as they exist and local competition as it comes. It is only by knowing one another better and getting together and determining what is best for all to do in our own home town that we can, working by our Code of Ethics, as has been suggested to us, as far as possible, finally settle our own problems.

I think we might just as well be truthful with one another on this question of "bell ringing." We sometimes say about an uneducated person, the better he becomes financially the better his morals become. I wonder if we won't admit we will arrive at a situation personally where we will do things under the compelling force of the owner we represent, we would not do under the ordinary circumstance? Are you quite sure you won't think up some scheme that will amount to the same thing in the end?

We need to talk in terms of building feet for advertising purposes. When it comes to renting space, too often we find we have educated our tenants to compare the space in different buildings in terms of square feet. There are so many different kinds of square feet there is no comparison. If we can go a step further and attempt to determine each tenant's needs and sell him more intelligently the kind of space he requires, we can expect to take care of his needs for less rental than he would be able to take care of them himself.

Don't let us forget we may know something about the brokerage business and the building management business, but most of us know nothing about advertising. Isn't it better to consult the advertising man on this end of the game? I believe in doing so and paying his fee and getting the advice we want. (Applause).

THE CHAIRMAN: Touching on what Mr. Ballard said, I am a thorough advocate of newspaper advertising and I believe it is the right way to place before the public the wares you have to sell. I would strongly advise every building manager who proposes to advertise on a large scale, particularly, that he select the best advertising man in his city and educate him by constant contact and consultation on just what he wants to advertise, and how he wants to do it. The advertising man is better versed on

copy and size of type and position in the papers than you are, and he is best qualified to place that advertising for you. You do not pay any more to the newspaper by engaging that man, but you obtain preferred service of that man just as an owner does when he employs a good building manager. Keep him on the right lines and direct the methods by which he proposes to advertise your space.

After some announcements by Mr. Monville, the Breakfast Conference was declared adjourned.

Methods of Management of Apartments

WEDNESDAY BREAKFAST CONFERENCE

June 21, 1922

The Live Topic conference of Wednesday morning was presided over by Mr. A. D. Wilson, of Denver, in the absence of Mr. Paul Steinbrecher, of Chicago, who was to have led the discussion.

CHAIRMAN WILSON: The topic assigned for discussion this morning was "Wall Paper versus Paint for Interior Decoration." We will broaden this and discuss methods of management of apartments, such as collections, repairs, methods of remitting, and any subject we will have time to discuss along that line. We will limit the speeches to five minutes, and try to make them snappy. I will call on a man from the east to start the discussion.

E. K. VAN WINKLE, New York City: In New York we have agencies, and it has always been of great interest to me how the other fellow kept his books and handled his rents, and how he remitted to the owner of the property. In the course of time, for one reason or another, I have been forced to change my system. I started out without any system. I had been in a bank and thought I knew something about bookkeeping, so I went along. Then I called in Haskins & Sells. They found out how much I had lost and how much the property owners had been deprived of in their income. When he got through, he said, "I think I can put in a system that will work very well."

They designed a system and when I looked at it, I said, "I cannot understand it and do not know how to use it. It will take too much time and labor to run it."

He assured me it would not. I gave him a chance and had the forms printed. They were printed only on one side. I used that system, and instead of having to help out the bookkeeping department at the end of every month by using what little experience I had in finding errors and making the books balance, the books were kept in balance all the time.

Not knowing you could employ auditors to do small work—I thought only corporations could afford auditors—I went on and changed my books as they seemed to require. Some years later I found I did not have as good a system as I thought I had. I had another loss and called in another auditor. He did the same thing. He had to go back two or three years and find out what the business had been during that time. Together, we revamped the system. Now

I believe I still have a pretty good system. I get a pretty good report from my bookkeeper at the end of the month. I continued the auditor. He comes in every month and goes over the bookkeeper's balance and tells how much cash is in the bank and how much is owing to me, and it is absolutely complete. I think every manager's office that does not have a system that ties up properly should get an auditor. It is worth \$25 a month to do that work. The head of the office does not waste his time with a lot of figures.

In New York we still bill our tenants. We send rent bills at the first of the month, and later on—I speak for myself, and I think my competitors do the same thing—to some extent send receipts.

In our medium-priced houses we have no difficulty getting our money; but in the better class of apartments, everybody has a bank account and says, "I will send in a check," and I find it more or less difficult to get that money. Tenants will lag a little and get a notice on the tenth. One time I sent a form letter. Then I decided that took a lot of time to fill in. Now I use a card for a window envelope. I find it brings in the money as quickly as a special letter.

If the rents are not in by the fifteenth, it is up to the man who has charge of the collections either to call individually on the tenant or telephone or write him a special letter to get that rent. I think the method could be very much improved. In the small houses such as private houses and single buildings where we get remittances promptly and we have no repairs of any consequence, we send out those statements by the tenth of the month. The other statements go out about the fifteenth. On apartment houses where we have quite a number of repairs every month, we do not send them out until the thirtieth. We try to have them ready for mailing on the thirtieth. If ready before the thirtieth, we do not send them, because we would spoil the property owner and he would always want his statement on the twenty-fifth. Rather than send a statement without being complete in having all the receipted vouchers, etc., and to give us a chance to get in the last remaining rents, it is better not to have to complete your statement until the thirtieth.

We make up that statement in triplicate. The bookkeeper has the formal statement filled out except for the filling in of the amount of rent collected per month, and filling in the disbursements. The bookkeeper, after putting it in pencil, passes it to the stenographer, who typewrites the statement on the other two forms. The original form is sent to the owner and the duplicate form with the pencil copy are kept together. A voucher check is used, and a duplicate of that voucher check is attached to the statement. The letter addressed to the owner enclosing a state-

ment, and showing what balance is enclosed, is also kept with the statement. They are bound together and filed, and you have a complete record of the letter, voucher, check and statement. That completes the cycle.

We do something else in New York that is not done ordinarily in other cities. In renting apartments and private houses, we have brokers in our own office. In my office there is a renting broker. If a tenant comes to the office from a building, he is turned over to the management department which negotiates and closes the lease. If a prospective renter comes into the office not sent from any of our buildings, the renting broker gets him and gives him a list of apartments in our own buildings and buildings operated by other agents. If he succeeds in renting an apartment in one of our own buildings, he gets a commission on the same basis as if rented in some owner's building. We charge the cost of the renting up to the agency department and keep our income from the agency department separate from the brokerage department. We proportion the expenses between the two departments. In my office the insurance department is not large enough to carry separate classification and I throw it into the management end of the business. (Applause.)

ALFRED C. KENNEDY, Omaha: I think our system in Omaha is very similar to the one in New York, from his description. We do not have any collectors of any kind whatsoever. They pay the rent at our office. If we have to go out after it, we very often carry a notice in our pocket to enforce if they don't come across. We feel it is a matter of education with the tenant; that it is up to him to be educated to pay his rent cash in advance, and we try to live up to that pretty closely.

In our own office we do not send any bills until about the fifth of the month. If the rent is not in by that time, we send a similar notice to that of Mr. Van Winkle's in a little form calling attention to the fact their rent is overdue. About the tenth of the month we start calling them on the telephone if we have not heard. We try to make remittances to the owners about the twentieth so as to get cleaned up on that end of the work before we start in on the first. We get a good many remittances in cash at the office, as well as by check. (Applause.)

FRANK B. ARNOLD, Cleveland: I have some one very competent who takes care of my accounts. Possibly I might tell how we make our collections and how it reaches the books. We give no receipts for rent. When a tenant comes into our office to make a rental, three cards are filled out. One we call the tenant's card, which gives his life history and the history of his family, the ages of his children, etc. And then a counter card is made arranged to run

two years, and as the tenant pays his rent, the cashier enters the rental for the month on the counter card. The tenant is also given a duplicate of that card, and the only receipt we give is on that card the tenant has. In other words, if he does not bring his card, or sends a check by mail, he gets no receipt.

We have very few tenants from whom we have to collect rent with a collector. We impress upon his mind that his rent is so much money, and it does not necessitate chasing him up with a collector. He knows when it is due.

We keep the usual rent roll. It is run by controlled accounts. At the end of the month statements are made up, and we have a statement that was intended to be so simple any woman who knows anything of bookkeeping could understand everything about it. Each disbursement is accompanied by the receipted voucher. Those statements go out on the fifth of every month for the month preceding.

EUGENE N. FRITZ, San Francisco: I am afraid I cannot interest you, being an owner and managing my own building. I have the Rand Visible system of bookkeeping. Each building has a steel book bound in leather, and when opened the number of each apartment consecutively arranged, is before me with the date on which the rent falls due and the name of the tenant, and the amount of rent. Slips of isinglass of different shades are used and for rent that is just past due I use green, and the rent of a person who has to be watched I put in red (which means danger). (Laughter). In that way, the moment I throw open my book I can tell instantly the money that should be collected. (Applause).

D. M. ROWE, Dayton: This gentleman just spoke of having an indicator to show when the rents are due. My system is to have all rents due on the first of the month in advance. We do not have to look it up. If I rent an apartment or dwelling or office, the first payment is made from the date he starts his rent to the first of the next month. From then on, it is a month's rent on the first.

MR. FRITZ: Unfortunately, being in San Francisco, we have furnished apartments. Perhaps I will have twelve apartments vacated in one day. My help is not so arranged as to put them in a suitable state of splendor in one day; therefore I want my tenants moving in and out all through the month, if possible. I do not want rents falling due on the first of the month.

MR. ROWE: If a tenant rents on the twentieth, collect ten days' rent.

MR. FRITZ: Then they will all move out on the first. They move when the rent is due.

THE CHAIRMAN: In Denver we do not like to have them move out at all. (Laughter).

MR. ROWE: What is the length of your tenancy?

MR. FRITZ: The average tenancy in the furnished apartment is three months.

THE CHAIRMAN: May we have a discussion on the question of repairs—papering versus painting?

E. EVERETT THORPE, New York City: About ten years ago the style changed in New York to paint, and along with the paint came the paneling of the walls. Paper was so cheap, and sometimes two or three papers can be put on without scraping off the old paper; so we changed to painting and paneling the walls. To take one paper off and re-paper it costs one-half as much as to remove the paper and give four coats of paint, without the paneling. The popular style is to panel the walls, using one and one-half inch moulding, running the panels according to the size and shape of the room. The panels are usually about six feet wide. Then the walls are scraped and prepared. It is more or less of a costly operation. Every little fire crack must be filled up. We use an oil paint.

Once the walls are painted, it is a cheap operation to re-paint them—much cheaper than to scrape paper and re-paper, especially where tenants have their own notion about what the cost of the paper should be. We do not have trouble limiting the tenants on the cost of paint.

We used to put limits on papering according to the amount of rent paid. In our houses, we allowed a tenant a dollar a roll on bedrooms and two dollars on living rooms and hall where he paid \$3,000 a year or more; and 75 cents and \$1.50 respectively where he paid less than \$3,000. In all cases they wanted four- and five-dollar paper.

I think painting has a great advantage, not only from the economical point of view, but it is more sanitary to paint walls, and the apartments always look cleaner when you are showing them. It is easier to get new tenants. (Applause).

CAPTAIN W. M. MCINTYRE, Cincinnati: In painting, as suggested by the pictures in the lighting exhibit, a flat finish was preferable to a gloss finish.

In cleaning paint, I find it an advantage to starch the wall after it is painted. Then to clean the wall it is not necessary to use any alkali material to clean the paint. You can purchase what is known as "Diastafor," which is a by-product of steel. It can be bought from any steel manufacturer. It is non-poisonous. All you do is to put about one tablespoonful in a bucket of water and wash down the wall. It removes the starch and also the dirt.

Lace curtains can be washed with this material without a bit of soap, and the material is not injured in the least. It

will wash the curtains cleaner and give them a better appearance than where soap is used.

By washing paint with alkali, you remove the oil in the paint, and this takes the life out of the paint. By using a starch you lengthen the life of your paint. (Applause).

MR. FRITZ: We put the gloss finish up to the panel, and in the center of the panel we have a flat finish. The gloss finish will wash better. We wash the walls every time there is a change of tenant. We use two men; one washes with soda solution in luke-warm water with a sponge, and the other follows him with clear water and a sponge, and removes the soda. If it is too strong of course it will destroy the paint.

We cover all walls in kitchens and bathrooms with cloth. We canvas all the walls before we put on the wood mouldings. The kitchens (above the tiling) and the bathrooms are covered with cloth. We use prepared Sanitas, which has a gloss finish. Mr. McIntyre's suggestion is used by many of us as the most efficient way of keeping the kitchens in order. If we do not cover it with the starch coat, we wash with soda and water every time there is a change of tenancy, keeping an apartment in good condition.

CAPTAIN MCINTYRE: You can remove ink or grease from a wall without staining the wall by using the starch.

THE CHAIRMAN: Where the plaster is cracked or in bad shape, we cover the wall with Sanitas. It is good for four or five years. We varnish it after three or four years and paint it white. In kitchens and bathrooms where the place is in good shape, we shellac the wall and give it a couple of coats of lead and turpentine. If we put in oil, it will turn yellow. On top of that we mix an enamel, China coat and paint half-in-half, and give it a coat of enamel. That will last three years. We wash it once a year, and at the end of the third year we give it another coat of enamel. We find that the most satisfactory for kitchens and bathrooms.

We are trying to paint all the walls instead of papering. In the long run it is the cheapest. We have a different situation than the office buildings, because we have to cater to the ladies, and they want paper to match their furniture.

MR. THORPE: We put on Sanitas or any of these prepared canvases and it is put on under the moulding so it won't come off. You save two coats of paint and it leaves a stipple effect that is even and pretty. For the last three years the price of the material has been so high we have not used it.

In doing over an apartment, we clean the walls, go over the cracks, give four coats of paint, and stipple them.

THE CHAIRMAN: The question has been asked. "How much

do you figure the cost of papering per apartment?" say for apartment that rents for \$3,000 a year.

MR. VAN WINKLE: I have always figured the cost of decorating an apartment not in paper alone, but in the complete work of redecorating. In a flat house we used to figure we would spend a month's rent on a new tenant. That would calcimine the ceilings and paper the walls and varnish the woodwork and floors. If you had paper to take off, it would run the cost up a little.

During the war, it has cost us a month and a half to two month's rent, but we did not have so many apartments to do, so that we did not spend as much money during the war as before.

In high-class apartments where we make leases for three years, to redecorate will take about three month's rent. We figure we must have a three-year lease. We do not make less than three-year leases at the present time, but we renew leases with old tenants for two years and then we do maybe one-third of the apartment. We won't give as much in the way of repairs in proportion on two years as on three. If only a one-year lease is signed, we cut it down to almost nothing. We want to induce the tenant to take as long a lease as possible.

THE CHAIRMAN: In the matter of consulting the owner regarding repairs, do you consult the owner on each repair or go ahead yourself?

MR. ROWE: When anyone comes to me to take over property for management, I say on the start: "I want it understood I am to manage this property. You are looking to me for results. I cannot get results if you expect to dictate. You must depend on my judgment."

I do not consult my clients except it is a case of doing some very extensive repairs running into a thousand dollars. I say, "This thing needs to be done," and that is all there is to it. I never have any of our clients question my judgment.

MR. FRITZ: I would like to find out how the managers treat their radiators where the walls are discolored. Is there any way to stop it?

MR. VAN WINKLE: Putting a metal hood over the radiator would prevent the drawing of the cold air in at the floor. The air being heated and the dust sticking to it, it is thrown toward the ceiling and makes a black streak in that corner. I think the hood is rather ugly and I do not think people would have them, generally speaking.

MR. THORPE: Probably the easiest way is to box your radiators and leave them open along the sides. It will diffuse the heat all into the room so that the current does not deposit the dirt in one spot. If in front of the windows, you do not have so much of that trouble. All radiators should be put there. (Adjournment).

Services of the Building Manager Rendered During the Con- struction Period

THURSDAY BREAKFAST CONFERENCE

June 22, 1922

The Live Topic Conference was held at breakfast on Thursday morning, presided over by M. S. Halliday, of Cleveland.

CHAIRMAN HALLIDAY: The service of the building manager rendered during construction is one of those recognitions that the building manager is becoming more than a pleasant-faced janitor. The services of the building manager prior to construction are perhaps even a greater recognition of the value of the service and its professional value, because the building manager is brought into a conference with another recognized profession—that of the architect—in order to protect the money of the prospective owner prior to its investment in the building.

A little later I will ask some of you to talk about the practical experience you have had, particularly in that field known as the services of the building manager prior to construction—during the planning period. If we can get a few kernels of experience to pass around to each other, it will be of value to us and to the whole business.

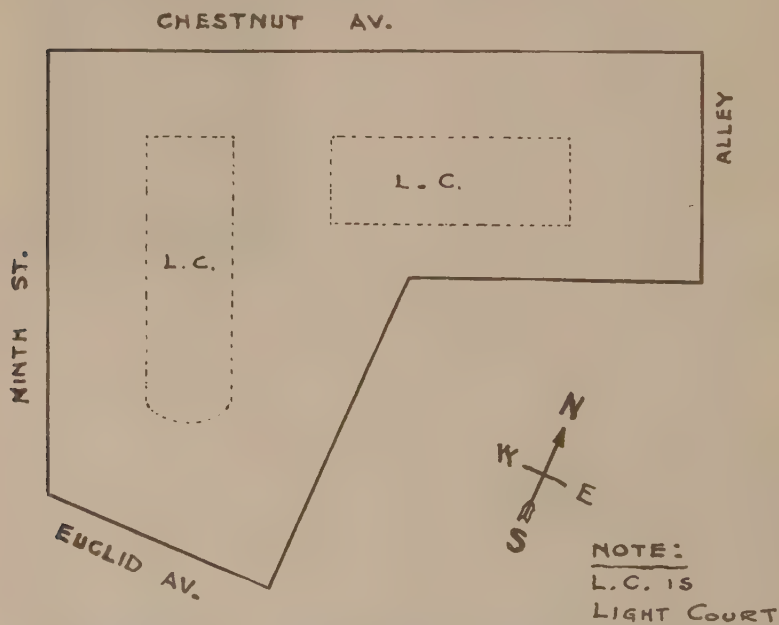


This topic could have been assigned for discussion. I tried to tell President Coley I did not know very much about the services of a building manager during construction; but perhaps it is proper for the Chairman of the Conference to get most from the conference itself. The President has always insisted we have built that building in Cleveland. We have not. We are just tearing down the old buildings. Anything I might contribute to this conference would have to be along the lines of service of the building manager rendered prior to the construction period. I think that is even a greater recognition of the profession than that during the construction period. To have the building manager called in to advise with a prospective owner or with the one planning to invest his money in a building, is of great importance to the profession.

So far as the new Union Trust building is concerned, it was conceived by a building manager of the owner type, but one who had had practical experience. He put together the land upon which it will be built. He called in architects. Soon after the architect had drawn a few preliminary sketches, he called in a building manager of twenty years' experience. They have worked with, co-operated with, fought over and discussed and argued with and debated with the architects over plans from Plan No. 1 to Plan No. 50 in the gradual development of the building. The value this pair have been is inestimable, and there is no question at all of the great value they will be during the construction period when they are picking out the various things that go into the building, etc.

We have a building department connected with our institution. The Chairman of the Building Committee, Mr. C. L. Bradley, is the former building owner-manager above referred to and Vice-President of the bank. I am Secretary of the Building Committee of which Mr. Bradley is Chairman. Mr. G. D. McGwinn is the building manager called in, and within six months after that he was made a Vice-President of the bank. That is the recognition we have been looking forward to. Personally, I was made an Assistant Vice-President of the bank.

(Sketches plot of building on blackboard.)



Our Chairman wanted a property with a good frontage on the main street, but with a much larger frontage on the cheaper land of a back street.

Our building is in the form of an "L," with 146 feet on Euclid avenue, 257 feet on Ninth street and 516 feet on Chester avenue, facing the lake to the north. Our most expensive frontage is the shortest frontage; our next most expensive frontage is slightly longer, but our longest frontage is the cheapest. It is interesting to note that we will rent the offices on the long frontage over the cheapest land for the most money. Why? Tenants will have north light, a view of the lake, quiet, less dirt, and yet their entrance will be from the main street. We have two light courts about 170 by 50 feet and 160 by 50 feet. These are veritable streets in themselves. The building is 250 feet high. There is a height limit in Cleveland and we have reached it—makes twenty floors.

The question arose—"Where should we put our elevators?" From Plan No. 1 to Plan No. 20, we had three groups of elevators, 6-6 and 12, located at the three extreme corners of the building. The lack of economy of operation worried these building managers. They began to confer with the architects to develop something to overcome that lack of economy. The architects finally in Plan No. 21 grouped all of the elevators, twenty-eight in number, in one space. This space is the only dead space of the entire building plan. The space on which two of the groups of elevators had been proposed, therefore, became rentable area. That area capitalized at \$3.00 a square foot will pay the interest on \$750,000. Thus over night, as it were (due to the suggestions of these building managers), the banking corporation acquired a new asset, amounting to three-quarters of a million dollars.

Ninth street is the only important cross street in downtown Cleveland. Cleveland is built on quicksand—a layer of 20 feet about 20 feet below the surface. When you dig into it, it is costly to put in a sub-basement. The building manager's suggestion was, "Let us save the cost of the sub-basement." On a nearby plot will be placed the Service Building, with room for power and heating plant, which obviates the necessity of going into the quicksand, which would have cost about \$500,000 extra. We have stores for rent in front of the Service Building which helps carry this building.

The question of stores on the street fronts has been a building manager's fight, but, as a result, we have stores all around except at the entrances of the bank, and building. We will build it like the modern theatres, with prominent entrances, but the auditorium or lobby in back of the stores. There is a main bank entrance on both Ninth street and Euclid. We will have stores on Euclid and down Ninth as well as on Chestnut avenue. These are about forty-store units. Some tenants, of course, will rent more than one unit. They are shops, not stores, about twenty-eight feet deep.

Our column spacing was determined by the bank needs, when

it was decided that the bank was the dominant influence. We have 17 feet on Ninth and 18 feet on the North Frontage. From that you can cut two eight-foot offices. The office depth averages from 20 to 27 feet. Some of the court offices are 18 feet, and the net ceiling height is about 10 feet 10 inches.

(Shows blue print of typical floor, also grouping of elevators.)

After a man enters the office building, he leaves the main passageway and goes into his particular "pocket," depending upon the floor which he wants to reach. Our 28 elevators are on the basis of 20,000 to 25,000 square feet per elevator. The Otis Company are trying to convince us we can get along with 22 elevators, which would make it from 25,000 to 28,000 square feet per elevator; and there are those who do not think we can do it. We are up against a real problem. One car will not at any one time take care of all the people during the rush period. We must meet it by having the next car come surely and promptly not more than fifteen seconds later.

As we have decided to have the building now, exclusive of bank equipment, we are getting it for less than 50 cents a cubic foot, without carrying charges and architect's fees. We have estimated a rental of three dollars a square foot solely for the purpose of letting the owners see where we are coming out.

ANDREW JOHNSTONE, Philadelphia: Possibly you have investigated one question that is giving me some concern in a new building under way, which I have charge of. The question is as to the width of doors. Have you investigated the proper width for office doors?

MR. HALLIDAY: No; I must confess I have not.

PRESIDENT COLEY: We find a forty-inch corridor door is ample for any piece of furniture that comes into a building.

MR. JOHNSTONE: The reason I want information particularly is because the President of our Company has the idea that office doors in general are made too large. He started off with the idea that no office door in the building should be more than 2 feet 6 inches. His idea is no entrance door should be more than 2 feet 8 inches. After quite a considerable discussion from different points and trying to get him to look at it in a different way, he at last conceded two inches, and says no office door in that 20-story building, 272 feet high, should be more than 2 feet 10 inches; that he has investigated other buildings and furniture, and no office furniture is made that cannot be gotten into that door. I would like to get definite information to take to him on that subject.

MR. HALLIDAY: Mr. Coley has given information from long experience. I think our doors are about 40-inch doors. He has actually used his doors.

PRESIDENT COLEY: Our main corridor door is forty inches. It is lined with terra cotta and marble. We have never had to

take down any of that marble. Our inside partition doors are 36 inches, and in seven years we have taken down about two dozen partitions to let in pieces of furniture. Our connecting doors from bay to bay are 30 inches, but nothing goes through them except human beings.

MR. JOHNSTONE: Could I hear something from some of the men who have had experience with narrow doors? The wider the door, the easier to get in and out.

MR. HALLIDAY: The narrower your corridor doors, the more marble you will have to put in, and the cost will equalize itself.

MR. JOHNSTONE: Our President is quite a large man himself, both bodily and otherwise, and he has had a good deal of experience on yachts. He says none of the yacht doors are more than 2 feet 6 inches; therefore, office doors need not be wider. (Laughter.)

MR. HALLIDAY: I will ask the San Francisco people to discuss one of the problems they have had before construction, where the building manager and the Secretary of the Local Association and all the resources of the local association have been brought in to help in the problem of the construction of an important building on an important piece of real estate in San Francisco. They are fighting over the question to Plan No. 100 by this time.

(Plans tacked on blackboard.)

RAE T. SMITH, San Francisco: The Plan No. 3 as shown was the architect's favorite. It is a tower building on a two-story building that covers the entire lot. We have 239 feet on one street, 240 on the other, and 180 feet on the rear. The architect's idea was to erect a monumental building for a bank. He proposed to put up a tower building 41 stories—the higher the better. At the instance of the other people working on it, we developed the "Y" type. His idea was to stick to the ornamental part, and he had a lot of fan-shaped offices which are not desirable.

Later on, Plan No. 2 was developed by another architect, and those who have to operate the building favor it. We have made an extensive report on it and it is now up to the people putting up the money to decide which building they wish to erect. Mr. Applegarth and Mr. Mead have worked on this. They seem to be listening to the advice of people who know, which proves the building manager is coming into his own some time or other.

EDWARD M. APPLGARTH, San Francisco: In San Francisco we are not putting in 27-foot offices. The reason is Mr. Smith's predecessor made an exhaustive tour of the country on that one question, and came to the conclusion for our climate and conditions, we could not afford to build an office too deep. We cannot "T" an office and get the rental because the help will not work without California sunshine. That is what we must sell and we

must keep our commodity in the open. That is why some of you gentlemen may criticize the smaller offices.

In these two plans, we put the elevators in the dead space of the building which comes in the center of the lot. The idea of setting your cars on the outside is new.

RAE T. SMITH: I have a report made by Mr. Stimmel and myself, and I would like to have some criticisms on it if anybody would like to look it over. (Exhibits large leather-covered report.)

MR. HALLIDAY: I looked it over myself and it is well worth study.

The important new development in the building managers' profession is the fact he is becoming more and more a factor. We must remember the owner is spending the money, and the building manager can make a mistake in his field just as easily as an architect, and perhaps even more easily in some instances. Frequently he has not had the business experience the architect has had. It does not do to forget for a moment you are spending the money of somebody else, and the owner when he selects you during the preliminary planning has faith that you will be able to help him make or save some money. A little later, when the building gets along, he has hope that things will work out all right. After the building is completed the problem is up to you to get returns. We have had faith and hope; now you must select a building owner who has also charity, because you will need it if you do not produce the results you said you were going to! (Applause.)

There is one thing we have fought for so far. The subject was brought up at another meeting of the importance of having good material in your building—not skimping the building to its detriment. There is a dividing line always, and we have tried to think we wanted, as a matter of principle, the thing which would do the work satisfactorily for the least money. We think many a building owner has had a lot of money spent foolishly putting in something better than was needed. "Will it work? Is it good enough?" There is danger, of course, that you may be lured into getting something cheap that is not good enough. Will it satisfy you and meet the requirements including a factory of safety, but no more? You are saving the owner money if you can answer in the affirmative.

THE PRESIDENT: I want to thank you for the leading of this conference. I think this has been a valuable contribution to our Association. (Applause.)

Office Building Service Rendered Under the Lease

FRIDAY BREAKFAST CONFERENCE

JUNE 23, 1922.

In the absence of William Marshall Ellis, of Chicago, the Live Topic Conference on Friday morning was presided over by W. M. MacLachlan, of Detroit.

CHAIRMAN MACLACHLAN: This morning's subject for discussion is "Service Rendered Under the Lease." In the various cities of this country the service rendered by the lessor does not always consist of the same thing. The question naturally arises as to what service should be rendered the tenant without additional costs. Whether, or not awnings are furnished as part of the lease contract? Are the rugs cleaned for the tenant; or the tenant's furniture polished; is heat furnished after certain hours in the week days, or is it furnished only between certain hours on holidays or Sundays? The answers to these questions vary in the different cities, perhaps because of a long established precedent. Because of our congested streets, some have erected garages for the purpose of housing their tenant's cars. The Pacific Mutual Building, of San Francisco, is one, while the Kirby Building, of Cleveland, is another. Many of us here would like to know what charge is made for garage service, and whether or not it pays the owners to invest in what may be called an accessory business.

CAPTAIN W. M. MCINTYRE, Cincinnati: Before I talk on the subject I would like to advance a topic that would be interesting to the National Association members. The last two or three days I have been hearing about fighting different laws proposed in different states. I found in each case the person who has talked to me did not advance information in regard to the proceedings of their fight to the Secretary of the National Association. I think that is essential. When you have a fight in any of your cities on any subject, you should apprise the National Secretary of the full particulars so that the others who write to him for information may have the benefit of your experience.

Now as to the subject of services under the lease: As I see it, you should standardize on certain conditions and work along that line. You know what the services ought to be, yet many of your tenants demand more service. Those persons who demand more service should pay for that extra service, and it should be charged through the office, not as some of the people are doing by handing a quarter or half dollar to the janitor or the electrician or some other employee.

The service of lamps and current is charged to the office.

If a man desires to have some boxes opened, or some stenographer wants the pictures changed in the office, the tenant says, "Call the office up and tell them to send Bill." The tenant will sometimes say, "I want him to take my valise home"—all on the expense of the office. It makes no difference to me how long a man stays in the tenant's office. He can keep my man all day opening boxes and moving furniture, and there is no tipping allowed. At Christmas time I send a letter to the tenants suggesting no tips nor funds be collected for any of the help in the building.

In one building I know of, the starter stands at the foot of the elevator and bawls through his fingers: "Another five dollars! Who is the next man to give five dollars for the help of the building?"

Pay the help sufficient money and stop tipping.

Your lease should define what you intend to give to your tenants, and live up to it in every sense of the word. The Cincinnati Association has adopted the tax participating clause which we find works very effectively and to the benefit of the owners of the building. It makes no difference—we are willing to sign a lease practically any time a person wants it, for one to five years as he may see fit.

The question of furnishing sub-divided offices, of course, depends on the rental basis from which you start. What is your standardization? Some buildings have storage space in the basement or attic which they give free to the tenants. My thought on the matter is that this is poor policy. The tenants will store material of no value whatsoever. If you should charge for it you would realize a very nice sum of money for that storage. The tenant will not store a broken down table, chair, or desk, or other materials he wants to take home. These articles will probably stay there three years for nothing.

I have heard of a building manager who believes in encouraging kickers to kick, which he does by the following lines on the back of his statement:

"Be quick to kick if it seems wrong,
But kick to me, and make it strong;
To make things right gives me delight
If I am wrong and you are right."

It is a question of finding the psychological moment to get men to come to him so he can rectify the error, adjust the complaint, make a better tenant, and sometimes correct a faulty impression created by some of his help. (Applause).

CHAIRMAN MACLACHLAN: Captain McIntyre has made a number of excellent suggestions in his talk.

PRESIDENT COLEY: I think the inspection service of a building to anticipate complaints of tenants is an investment which

brings great returns on the money for your owner, because you are not allowing the building to crumble away and deteriorate; and any time the owner should bring in a prospective new owner or a committee representing a probable purchaser, they can walk through the building and find it 100 per cent in repair. There are certain corners of your building which you seldom visit, and others you have no occasion to go into once in six months. If you have a man who has nothing to do except inspect and report to you his findings, and then you assign them to the proper persons for repair, you will find you keep your building up to the minute; you will have no complaints from the tenants, and the service is very much appreciated.

CAPTAIN MCINTYRE: I will say it is a big advantage to have inspection service for many reasons. For one thing, your tenants will gather paper and magazines and pile them in the office, retarding the janitor's service and increasing the hazard of fire. Also at night each one of the cleaners reports to the straw boss, and he to the watchman, a complete report of the faucets leaking, which report comes to the office in the morning and notice is given to the necessary department for correction wherever there is lack of service.

THE PRESIDENT: I think if you divide responsibility and depend upon the cleaning women to report defects you will not get the results. You must have a man who is an enemy of the cleaning women and plasterer and painter. The inspector is not favorably looked upon by any employee except the manager. Our inspector is hated by everybody in our building except myself. He shows up their defects.

CAPTAIN MCINTYRE: I have an outside man who does that work. But the chief janitor makes inspections once a month on everything and reports in detail.

A. D. WILSON, Denver: Our space is very limited in our building and storage space is a great source of revenue. In one building in Chicago where a certain man rents a space 2x4 and 6 feet long, he gets \$160 a year out of them. If you do not charge for storage space, the tenants will impose on you and you will have your basement full of junk. Some of it may stay years and years, whereas such storage space should be a good source of income.

CORBIN M. DUNCAN, Little Rock: If you store stuff in your building, you do not know what is in it. I was in the building at 10 o'clock and the night watchman said, "There's a fire in the basement." There was a stack of four boxes all ablaze. I never did find out what was in the boxes. The ceiling fell on me and knocked me out. If the tenants want to have things stored, let them take it to a storage warehouse.

EDWARD M. APPLEGARTH, San Francisco: There is a public garage in Los Angeles. We are putting a garage in the base-

ment of one of our new office buildings and I figure we will get twenty dollars per month per car. If you do not, you are not going to make anything. You figure the amount of space and the amount of run-way to get in and out, and there must be somebody there to see the car is not stolen. If you can get \$1.20 for dead space, you should get twice that for an automobile.

CAPTAIN MCINTYRE: Twenty dollars a month for an automobile averages \$221 per year for that space occupied. Avenues must be afforded. A garage has less lost space than office buildings.

CHAIRMAN MACLACHLAN: Some one has made the statement garages pay a higher rent in proportion to the investment for the yield area than office buildings do. This is based on investment per square foot. I believe that is the theory the Pacific Mutual Building worked on. After looking into the garage situation, they found they could get their garages and give the tenants service and get a greater return per square foot for office buildings.

MR. APPLGARTH: I would like to hear some discussion on the question of whether garages are not absolutely necessary in a district catering to doctors and dentists and the retail business? If the Pacific Mutual had no place provided for cars, other persons could not get to the tenant, nor their own tenants get to their customers.

ANDREW STEERS, Seattle: We find garages are absolutely necessary to provide the superior service for an office building, especially a Medical building. We have in Seattle in connection with the Metropolitan Building Company's properties a garage with a present capacity of about 250 cars, and the space allotted to that garage is always filled. We have a unique condition which permits the roof of this garage to be used for day storage, the charge for which is five dollars a month, or twenty-five cents a day. This roof is used all the time, and the space under that is also used. The garage rent is ten dollars a month.

So far as the investment return on a garage building versus an office building, of course it is conceded your construction cost is considerably less. But on the basis of what is being charged by the garage in Seattle, the difference would not be in favor of the garage. It is in our case, because the garage is in a so-called temporary building which has a life of about three years more. If it is possible to design an office building utilizing the basement space for garage purposes, in my opinion it would be quite justified by the return on the investment; in other words, you would be able to get more for your upstairs space by providing garage facilities than without.

CAPTAIN MCINTYRE: Speaking about garages in office buildings: On investigation, I find it penalizes your insurance on the building by having a hazard, even in a sprinkler system.

CHAIRMAN MACLACHLAN: What is the additional cost to a building by reason of the garage being there?

MR. APLEGARTH: Very little without sprinkling it, even. The sprinkler in a garage is very much of a joke. If the gas runs over your floor and the gasoline is burning, it will go that much further. The hazard is not as great providing you do not let them sell gas. We have no gasoline on the premises.

CAPTAIN MCINTYRE: As to the question of gas tank explosion, there are two provisions in Cincinnati. I have made investigation along the line of explosion from gas tanks, and the information I have gotten is that it is almost nil. The fire is caused by the leakage of a little gasoline under the car setting fire to the car by the explosion of the tank. This happens very seldom. The sprinkler system is to put the fire out and not throw the gasoline. If you are carrying two million dollars insurance on a building, I think they will penalize you ten cents a hundred for carrying equipment in the basement.

CHAIRMAN MACLACHLAN: It does not look as if we know much about garage service in an office building.

How about charging for electric light? Some of the managers are giving electric light bulbs as part of the service rendered.

J. CLYDESDALE CUSHMAN, New York: We make an original installation of lamps. We lamp up. The tenant finds light when he comes in. When he wants another, he must pay for it. We are glad to replace them, and make quite a profit from that service. I know of no reasons why a building manager should continue to give lamps. The psychology of it makes it necessary that he give the initial installation. The tenants are inclined to take lamps home with them. If you do not charge, you will find your lamp bills run up to excessive cost.

RAE I. SMITH, San Francisco: In San Francisco we furnish lights and also the lamps.

CHAIRMAN MACLACHLAN: This Association educated New York a few years ago, and I think we should now educate San Francisco.

RAE T. SMITH: We would like to have our tenants educated, but it is the custom to furnish them.

MR. CUSHMAN: In figuring on a new building today in New York we do not figure anything on public lighting or the cost of operating elevators and pumps. We get all that light and service for nothing from the profit we derive from the sale of the electric current. It always appears as zero in our calculation of a new building.

CAPTAIN MCINTYRE: I will say the same for the Union Central building in Cincinnati. I think in summer months we have made five cents per kilowatt. We consume 70,000 kilowatts

a month. As the leases expire, when renewing leases we put meters in and charge for them.

PRESIDENT COLEY: I want to give credit to this Association for telling New York how to do it and why they should do it. Mr. Cushman was chairman of our New York Committee that investigated the lighting situation all over the country. We found a belt of uneducated fellows on the Pacific coast giving free light, and another belt of more ignorant people on the Atlantic coast also giving free electric light; and an educated section around Chicago and the eastern middle west were charging for it. In the middle western part of the country and the southern districts there was a fifty-fifty break.

We determined we were all wrong, and that we should immediately upon the renewal of leases charge for electric current. It was a difficult problem in a great many instances, because the old buildings were so wired they would not permit of metering certain circuits which ran to individual offices. I think some of our men in New York are prorating the current distributed over a circuit which includes several tenants. However, in the Equitable building we were wired, because we were built by a Chicago architect who knew Chicago provides for metering, and it was easy to put in meters on the loops. We started to charge for current three years after we opened our doors. We gave free light in the original lease. Today we charge about one-third of our tenants for light. Our coal bill today is a little over \$150,000. Our income from one-third of the tenants is about \$75,000 a year collected in light.

CHAIRMAN MACLACHLAN: There is a very fine answer to this question of charging for light and the tenants paying for what they get.

Let us discuss the question of window shades and awnings.

ELL TORRANCE, Minneapolis: We do not charge for window shades.

ANDREW JOHNSTONE, Philadelphia: That question is about to come up with us. At the present time we are putting up a large building in Philadelphia, and I would like to find out from people who have Venetian blinds if they are generally used in office buildings in many parts of the country, and whether the tenant pays for the blind or the building furnishes it free; and whether in case of these blinds being used, if it is necessary or the practice to put up awnings? It seems to me the Venetian blind would eliminate the expense and danger of awnings. In Philadelphia we have had a great many fires caused by awnings catching fire from cigarettes being thrown out of the windows. My personal feeling is it would be advisable to put up the Venetian blinds, doing away with the roller shades and these awnings.

CHARLES W. BROOKS, Dayton: I had the same proposition and put blinds on the west side. I never permitted awnings and

never will. Where you use Venetian blinds you do not need shades. We put the blinds on all the windows to keep them uniform.

CHAIRMAN MACLACHLAN: Fred Swetland uses material with which he coats his awnings and they won't burn.

MR. JOHNSTONE: Has anyone the whole building or the southern or western exposure furnished with Venetian blinds?

MR. DUNCAN: About ten years ago I developed enthusiasm for Venetian blinds. They are all right for a while. I find the expense of maintenance is rather high and it is expensive to keep them clean. They are the worst dust-catcher, aside from the ordinary radiator, in a building, and they cannot be cleaned as easily. The blind must be hung on a hook and the cleaner must go over it with a brush. He cannot clean it in the office without getting dust all over everything. The theory is all right. You do not have to have awnings or shades. If it is possible to secure an awning constructed at an angle so that it won't catch a cigarette from an office on an upper floor the danger of fire is obviated. That is the type we are using now.

I put in in the neighborhood of six hundred of these Venetian blinds at an average cost of \$4.25. I have about one-half in the building now. Some of them have been taken down and stored and I am using these awnings. I find our tenants will not pay for Venetian blinds, but they will for awnings, and they must if they get them. The part of our service is to take down and put up the awnings.

MR. STEERS: We permit awnings on our building, but the tenant pays for them. We have an arrangement with an Awning Company, which manufactures awnings, to take them down, put them up, and repair them at the tenant's expense. We give the company a list of the tenants who have awnings and they make their own arrangements with them. The Awning Company stores the awnings.

T. H. LYNCH, New Orleans: In New Orleans it is practically necessary to use awnings all the year around. All the leases provide the tenant shall furnish a shade at his expense, of a color and design suitable to the building. Each building has practically a little different design. We have a lot of trouble with them burning up. The Association is trying to put on a campaign to advise the tenants not to throw cigarettes out of the window. I have tried to get the co-operation of the fire and police department. We catch men doing it and can't arrest them. I understand some of the associations have gotten out some pamphlets and I would like the information.

CHAIRMAN MACLACHLAN: This gentleman mentioned a rolling awning.

MR. LYNCH: We have fifteen hundred windows with awnings and they will just re-cover the frame.

JOHN T. HALL, Cincinnati: When they said the tenant pays for the awning, does he buy it outright?

MR. LYNCH: Absolutely.

MR. HALL: That includes the frame. Before they put an awning in anybody's office they submit a design to us. The older ones don't bother. The frame and everything belongs to the tenant. He leaves it and the next man gets it.

MR. CUSHMAN: I would strongly advise any one here against having anything to do with the storage of awnings. We had a sad little experience in that connection, where the superintendent of one of our buildings ordered an awning concern to take the awnings down and store them. It had a fire and all the awnings were burned up and we had to pay for them. The tenants felt they were relieved of responsibility since we had given the order.

MR. ———: We have a company who signs a contract with each tenant. The original contract calls for putting up the awnings in the spring and taking them down in the fall, storage and insurance on them.

MR. LYNCH: Has anybody ever been able to get awning insurance?

CHAIRMAN MACLACHLAN: I have. We have a clause which says the tenant shall furnish awnings and window shades, but he doesn't. We do. We get insurance on them, however.

Has anybody had experience renting radio service and what has been the experience?

MR. LYNCH: I have two radio companies with offices in my building, and both of them want to put up receiving stations. It would bring a lot of people into the building at night, and we refused.

The meeting then adjourned.

Association Bulletins

SATURDAY BREAKFAST CONFERENCE

June 24, 1922

The Saturday Live Topic Breakfast Conference was presided over by D. M. Rowe, of Dayton.

CHAIRMAN ROWE: If any of you read the Scriptures, you will have read when Christ was teaching the people, the Jewish officials came to Him and asked by what authority He taught? Perhaps some of you may want to know by what authority I say the things I may say in a few moments.



I would like to tell you of my experience in writing for the public. If I were to do that, you would probably think I am a little bit conceited, so I am not going to do that. The first article I ever wrote for public print, I cannot remember the year, but it was at the time of the great railroad strike in Chicago when Altgeld was Governor and Cleveland was President of the United States. There was considerable criticism on the part of the public and press of the Illinois National

Guard. I was at that time in the Ohio state service, and I was very jealous of the reputation of the Illinois National Guard, although I am from Ohio. If you disparage the work of the Guard in one state, it reflects on the other; so I undertook to write a defense of the Illinois National Guard, which was published in a military magazine. It was very much commented on, and I think it accomplished the purpose I intended it to do so far as it circulated.

When I became connected with the National Cash Register Company, I used to do a good deal of writing in connection with price lists, catalogues, etc., which meant writing descriptions, getting them in correct and understandable style, and making them brief.

During the last four years of my sixteen years' service with the National Cash Register Company, before going into business for myself, I was in the Foreign Sales Department, and in addition to running that department, I wrote and edited the foreign "N. C. R.," a magazine for the selling organization. These go all over the world. What I want to show you about these is they are made interesting. (Copies exhibited.) They have little stories about other countries, illustrated, and something about our factory; something about our people at the factory; something

about the people in the other territories. We try to make Peru and Chile acquainted with the Argentine and Brazil; we try to make our representatives in South America acquainted with those in European countries. We have pictures of them. So that as I bring out these points in my remarks, you will see what these great industrial companies are doing.

Here is a publication I picked up yesterday at the Casin Register Company's office, called the "N. C. R. News." It is a little magazine gotten out principally for the employees. We do not attempt to use any humor in these foreign "N. C. R.'s" In what would seem a joke to us, the foreigner would not see the point. For instance, it is common knowledge an Englishman very seldom sees the point in an American joke. It is the same way when you try to tell an English story to an American or Spaniard. They do carry out the personal idea in this little magazine, "N. C. R. News." You will find them telling all the other employees about some fellow and something he did. They even tell about his family—his children. Then they have a few poems. Here are reports of the football teams. Then they have jokes and personal paragraphs and cartoons and funny things about these people.

Here is a magazine gotten out by the Jeffrey Service. It is along the same lines, with cartoons and stories.

What is the idea? In the first place, I want to say it is my opinion, based on experience, that every local association that does not get out a bulletin is making a mistake. If your association only meets once a month, you certainly should get out a bulletin.

I think it should be a weekly bulletin. If you only meet whenever you feel like it, you should keep a weekly bulletin going. (Applause.)

WHAT IS A BULLETIN?

(a) The definition is—"A brief or condensed statement of news to the public, especially as issued by an acknowledged authority.

(b) "A periodical publication, especially one containing the proceedings of a society."

A bulletin then is a statement of news. It is a brief or condensed statement. As a statement of the news of an organization it is issued periodically or at regular intervals.

OBJECT OF A BULLETIN

In a discussion of our Building Manager bulletins we must first decide on the object of issuing a bulletin. What is the purpose of a bulletin? The answer to this question will determine the nature of a bulletin.

If the object be merely to quote from the minutes of our meetings so that those who stay away may read and keep informed; and to publish a few announcements; quote the price of waste paper, and a few other such items, then there need be no

discussion of the matter. Any one can get out such a bulletin. And after it is got out few, if any, will read it.

But there is, in fact, a big field for a good live bulletin. A real association bulletin will prove to be a big asset.

There is no use to discuss this question unless we are very frank. It is only by being very frank that we shall get any good out of the discussion. And so I propose to be perfectly frank. Now then, most of the bulletins that come to my desk are, to a large degree, uninteresting. This applies to some of the most elaborate, printed bulletins, as well as to some of those less pretentious.

Some of the bulletins are too lengthy. Some stick too much to a streeotype form. Very few have any human appeal. Seldom is there any originality. Nearly all are too prosy. They have no pep—nothing to make you want to read them—nothing to make you look forward to the next number.

If a bulletin is not read there is no use to issue it. It is a waste of energy and material as well as time.

All this criticism is meant in a friendly sense. The object is to point out how we can get the most good—the real good—out of our bulletins.

What is the greatest field of usefulness for our bulletins?

Well, what do we need most in our local associations? We need a larger percentage of attendance at the regular meetings. How are we going to get it? Use the bulletin.

We need a greater interest in the association. How are we going to get it? Use the bulletin.

We need a greater interest in each other and a warmer friendship among the members. To get it use the bulletin.

We need a greater personal feeling of friendship as between the various locals. Use the bulletin.

Why—don't you know that if you can once get this matter of real personal friendship—real warm, heartfelt friendship—established, you will have solved nearly every problem that affects the success of the organization? That one thing will overcome the disinterestedness of the members. Once you have the interest of the members you will have attendance at the meetings. You will have every one working for success. All will be pulling together.

Then when this spirit carries to the other associations and we all get to feeling right toward each other then the National association will experience greater strength.

All this can be done through our bulletins.

But I do not believe a monthly bulletin will accomplish much. I am sure that a weekly bulletin run off on a mimeograph on a plain sheet of paper will get across with better results than any of the high-toned printed monthly issues.

Right here let us notice again that a bulletin is not a magazine and it should not pretend to be one. It should not contain

any long articles. Brevity is the spice of life for a bulletin. Everything should be boiled down to a few sentences. There should be quantity of items rather than quantity in any one item.

Lengthy court decisions, and reports of professional or technical addresses should be got out in separate form. That will make it possible to classify them in files.

The editor of a bulletin should put things in his own language and style and make it conversational.

Most of all put in a great deal of personal matter. Talk a lot about persons. Make them talk to each other through the bulletin.

Men are most interested in men. That is why we like to read biographies and biographical sketches. They are about men and things men have done. They have human interest.

Man is the greatest of all God's creations. God made him only a little lower than the angels. But man proceeded to finish the job and make himself as low as possible. However, because man is the greatest of all created things, he is the most interesting. We all like to read about men.

Therefore, tell something right along about the members of your association. Play up their idiosyncrasies. Tell a joke about them. Jest them a little. Put a little joy in their lives. Too many have read those lines of Longfellow—

"Life is real, and life is earnest,"

and then have proceeded to take things so seriously that they are afraid to smile. They do not think about the other line,

"And the grave is not its goal."

We do not have to go through life thinking always who our pall-bearers are to be. Let us get some fun out of life as we go along. Scatter a little sunshine.

A bulletin is a great deal like those old sailing vessels. They needed plenty of sail to make them go, and sufficient ballast to keep an even keel. Humor and personal sketches represent the sails that get your bulletin across with its cargo of business items.

Perhaps I hear some solid business man say, "I don't believe in mixing vaudeville with business." I believe Col. Strong calls it persiflage. Well, I hate anything that begins with Percy—but let us see.

Joel Chandler Harris said:

"There are those, of course, who enter bitter protest against the American's commercialism, his devotion to the projects of trade and material development; but, so long as he carries his humor into his business, all will be well."

Some of our greatest men have been renowned humorists. At least one president was a world-renowned humorist.

It is said that American diplomacy has achieved some of its greatest victories by a Secretary of State noted for his humor.

Humor has played even a larger part than principles in our political campaigns.

Our largest industrial concerns have learned that the best way to keep up a loyal spirit among their employees is to issue a factory publication to engender a friendly feeling. These publications are filled with original personal jokes and cartoons.

So we have plenty of backing for the point we make. Bulletin jests should be original. They should, as a rule, be tied up to some member. A good story may be copied at times. But the trouble is most of them have appeared a dozen times before.

If your jests are home brew you are sure to have a "scoop" on them, as the newspapers say.

In the make-up of the bulletin it is best to intersperse the personal items and jests with the news or business items. Thus the reader never knows what is coming next and he will read the business item for fear he will miss something good. In fact, if the items are short he will have read them before he realizes it.

Now, just a word about our National Bulletin. By the way, I had come to the conclusion that it was hibernating. I had not received a copy for so long. But I did receive one just as I was writing this paragraph.

Our National Bulletin in the past has been too lengthy. Its items have been too wordy. It seemed to be striving to be a magazine instead of being just a bulletin. But this last number is much better. I notice they cut out about half my educational career in the notice about myself. Well, that's what I call cutting down an item. Make it brief. Most of that stuff is bunk anyway. A man stands or falls on what he is and does, not on his past history. A live wire looks ahead to the future. He is learning every day. He is a constant student.

The National Bulletin should not attempt to be a magazine. We have a National magazine in Building Management and it should be supported. At the Minneapolis convention Col. Strong said: "I may appropriately mention here that we are fortunate in already having an excellent professional magazine — Building Management.

"In my judgment, it is the best and most forward looking single factor in the entire situation. We could well have afforded to institute this magazine ourselves. Now that it is instituted, we cannot afford to leave anything undone to support it."

I heartily concur in this statement. But we do not need two such magazines. And I submit to you that the organization will not support two magazines. Building Management does not cost us anything but the subscription price. And it is well worth that. On the other hand, a National Bulletin Magazine would cost considerable money and we would be asked to pay additional dues to support it. That would be an unnecessary waste of funds.

Building Management will gladly publish any articles we will furnish along the line of our business. They will publish them

the way we want them published. We cannot ask more than that, and we should take advantage of this avenue for disseminating information.

Building Management is prepared to get out a magazine in a bright, readable style. Why try to compete with it at a great expense to ourselves?

It is easier to keep track of permanent matter if it is concentrated.

I approve of the Convention Proceedings being published in book form. But I see no reason why we should prohibit a resume of the addresses being published in Building Management pending the issue of the book. I happen to know that there are a number of members who agree with this sentiment.

The National Bulletin may be as dignified as you please. It need not be after the style set forth for the local bulletins. However, it should not be so dignified that it leans backward. It might fall and hit the back of its head. It should be newsy and snappy. If it cracks a smile now and then no one will object.

Let the object of all our bulletins be to stir up and maintain greater interest in the meetings, and good fellowship between the members, and between the various local associations.

Some of you may not agree with me. Maybe none of you agree. I have told you what I think. I will be glad to hear what you think.

JAMES J. SAYER, Portland: I feel when Mr. Rowe was assigned this topic, he decided to make three speeches out of it, and in doing so he was a good deal like the darkey who with his lady love was discussing what is the best thing on earth to eat. The darkey said he would give her three guesses. She started in on the first guess and said: "Possum, sweet taters, and water-milyun," when he interrupted with, "That ain't fair! You's said all dey is dat's good to eat!" (Laughter.)

So it is with Mr. Rowe's speech. I cannot see what end of this subject is left for anyone else.

As to what the contents of a bulletin should be, judged from his own experience and the example he sets, unless you are privileged to read that bulletin, you miss a great deal in life and you will be unable to appreciate fully Mr. Rowe's point of view.

Mr. Rowe dwells particularly on the humor of a bulletin. But I can imagine a paid secretary who must get out a bulletin indulging in some of the humor and some of the references and the stirring up of the joy of life among the members as he can indulge in. He would not get very far—about one issue—and he would be coming east to get something else to do.

Who publishes the best bulletin among those issued by the National Association is an interesting question. I found out when I came early to the convention the Portland bulletin was the best from the point of view of one man, and I also discovered this

man had told several other secretaries the same thing; so who gets out the best bulletin I do not know. They are all best. There come to my desk—I think I get complete files of the bulletins—bulletins issued semi-occasionally by Cleveland, Chicago and Toronto; monthly bulletins issued by Atlanta, Cincinnati, New Orleans, Philadelphia, San Francisco and Seattle; and weekly bulletins by Dayton, New York and Portland. The bulletins from Atlanta, Cincinnati and Philadelphia come in printed form. So does the Chicago, whenever it is issued. The Philadelphia bulletin and the Cincinnati contain advertisements. The Dayton, New York, Portland, Cleveland and Seattle bulletins are mimeographed or multigraphed copies, and in the main these bulletins deal with subjects that seem to be of most pertinent and pressing interest to the members.

I agree with Mr. Rowe about a monthly bulletin. When published only once a month, you must get too much in to make it amount to anything, and it is too far apart to have the news fresh. A weekly bulletin of shorter contents would be more effective. I, of course, believe in my own bulletin, which is a single page fool'scap size. It is mailed each Monday and gets to the members Tuesday morning on the opening of their mail, and the first item calls attention to the weekly meeting to be held that morning. It is a good reminder, and sometimes suggests the particular topics to be discussed. Then I aim to give short paragraphs containing a summary of some of the things in which the members are particularly interested from the point of view of the Association work, and such items as they are not able to get through the daily press and other sources, and references to the National Association work which I get through correspondence and reading the bulletins of the other associations to keep them advised.

I put in a few personal items, when a member is doing something of interest in general to the other members, or has received some distinction. We find it an excellent medium and a valuable means of sustaining the interest of the members of the Association from one week to another.

What will the members read? Mr. Rowe had the advantage over the Colonel in knowing just what the public wants in the way of a bulletin. But no matter how long or short your bulletin may be, there will be several members who will not look at it. With the subject touched upon in the bulletin right before them. I have had them call me up and ask about certain subjects. But as in the case of a newspaper, no one reads it all; but everyone reads one or more of the items, as you will discover no matter on what subject you touch. So the thing is to get the interest of the greatest number for the most of the time.

I believe in the value of a bulletin. We exchange bulletins with all the associations organized or doing anything. Some go so far as to mail a copy to every secretary as listed in Building

Management. It is an excellent plan, although it has very little value in the moribund associations because the secretaries change their addresses. (Applause).

FRED M. SCHAEFER, Atlanta: I feel like Mr. Sayer—that we get out a pretty good bulletin, too. We got out a monthly and a weekly bulletin. Our monthly is mailed to seventy-two cities to a list of about 350 names. This we send for the good of the profession in general, not only for our local association, but we feel we are doing something for every member of the National Association.

Our weekly bulletin I mail on Saturday to reach the members Monday morning. It contains confidential matter and goes to our members only. It keeps them in touch with the market price of all supplies and acquainted with the daily quotations on waste paper, old iron, brass, etc.

I would like to leave the value of our bulletin with our President and other members of the Atlanta Association.

E. M. HORINE, Atlanta: I did not expect to have anything to say on this subject at all; but our monthly bulletin, as well as the weekly, I believe is appreciated by every member of our Association because of the interesting matter which each contains. Our weekly bulletin gives us the best price, generally speaking, we are able to obtain for nearly all the supplies we use in our building. In connection with that, we are buying through our Secretary. The Association does not buy these articles, but secures for us the best price that can be obtained in the market—better than we can obtain ourselves. We telephone the Secretary our needs and he orders the articles delivered to our building and the bills are sent to the individual. The Association keeps a record of the materials that have been ordered for us; of the price we have to pay by this method as against buying them individually; so that we have a record in the Association office of the savings we are making for each and every building in our Association, both in taxes and in the matter of buying supplies. We can put on one side of the ledger the cost of being a member of our Association, and on the other side, what we are saving through being a member, and show in dollars and cents the value of the Association to him, aside from any other consideration.

We have so far—since we have gone on the assessment basis—in one item saved our members enough money in actual cash to pay the dues for four years. I am trying to stress the absolute necessity, and you will find it so in time, of getting on an assessment basis for your dues so you can do something; and you cannot render service to your members unless you do. (Applause).

PRESIDENT COLEY: Mr. Chairman, I want to thank you for what I think is a real contribution to the National Association records. When we endeavor to form a new association in any city, it has been the object of the National Association to assist

by presenting forms of constitution and by-laws and procedure of organization. Very few of us are gifted in writing Bulletins. We hardly know where to start or what subject-matter to furnish; but we recognize it is advantageous to hold an organization together. Consequently I feel your contribution this morning can well be used by the National Association to be sent to cities in which associations are to be formed so that they can use the suggestions which you have made on which to build a bulletin. (Applause).

CHAIRMAN ROWE: I thank Mr. Coley for those remarks.

Along the line of making up a bulletin, you will notice I referred to a stereotyped form. Those who get our Dayton bulletin will find sometimes we begin the bulletin with some jest or kidding article about some member or something done in our Association. You would think the head of the bulletin should have the most prominent article. The next below may be a business item. My whole idea in making it up is to write in such a way you do not know what is coming next. You start off reading something that may appeal to you. You say, "I wonder what's next?" Next is something about business. There is another personal item and you do not know how it is going to be. That is the trick in getting people to read it.

THOMAS F. EGAN, Philadelphia: The whole question, to my mind, is what is your opinion as to what a bulletin should be? I differ somewhat from your belief in this respect. In Philadelphia we think a bulletin should be something educational and should advertise the Association and advertise the city. We do not put in it anything which is confidential in any way. Special bulletins are issued every week—a mimeographed sheet of paper or two. Sometimes it is issued twice a week. This gives special information to the members of the organization. We use our bulletin entirely in an educational and advertising way. For instance, one of our members subscribes to Building Management. I asked him if he had read a certain article. He said "No."

"Why don't you read the paper?"

"That is what we expect you to do. You save us time by going through Building Management and the National Association Bulletin and other bulletins and pick out the meat and putting it in our bulletin."

We believe in the advertising end of the bulletin—that is advertising among the managers and owners who are not members of the Association. Advertising the Association among owners of buildings whose managers are in the Association, and among the city officials and trust companies, will do a big work for our Association and help to educate the public outside of our Association as to what we are endeavoring to do in many ways. (Applause).

C. F. MERRITT, New York City: I do not profess to be in position to form an opinion along with Mr. Rowe, but I feel I must take exception to some of his remarks. His bulletin in my opinion is a fine piece of work and certainly interesting. It carries attention from beginning to end and we are glad to receive it. But should I use a bulletin of that kind, I am rather afraid in my Association it would not have the same effect. I rather feel in Dayton the men are more or less well acquainted. It is a small group of men, comparatively, and they know each other very well. If I should put some of the remarks in my bulletin that occur in the Dayton bulletin, about 98 per cent of my men would not know what I was talking about. I have to keep in mind that the bulletin that issues from my office goes not only to the members, but having reached the members, it is sent through to other organizations. I find it finally gets to the officials.

The other day I was transacting some business with one of the banks and happened to remark I was connected with the Building Managers' Association of New York. He reached across his desk and showed me my own bulletin. So I must keep that in mind.

I think the keynote of it is this: the issuing of a bulletin is very little more than the issuing of any other periodical. We must consider the people who are going to read it. It is not my opinion that must be the guide. It is, "What do those who read it want?" I think that is the reason our Sunday newspapers have reached their present circulation. Each is trying to find what the people who read the paper want.

In our Association, I have an idea our members do not want that type of bulletin—not that it is not a success in Dayton, because it is; but I know that kind of bulletin issued in New York would not be a success.

I endeavored at one time to have a section which I called "Elevator Gossip," and tried to bring in a little humor about the different members. I only issued it once. I figured it was not wanted. I breezed around and have a faculty of sensing how men take these things without asking.

I try to give the men the activities of our Association and to bring before the public that receives it some idea of what we are trying to do, and what we are accomplishing. I have just introduced a new feature that may not be good—the copying of short articles or listing items from trade publications. I have coming to my desk about twenty publications—sale papers promoting a certain industry and several others. I do not have time to read them all, but I look through and try to catch some item of interest so that our members may get the original article and read it.

The question of Bulletins in my mind is just to find out what your Association needs, what it must have, and then if possible

give it that sort of thing. If you do not, the members won't read it. So it is a local problem. If Mr. Rowe were in a different association, he would probably issue a different kind of bulletin. My opinion is that along all lines we must find out what is needed in the local association, and issue one accordingly. (Applause).

CHAIRMAN ROWE: I am glad to hear Mr. Merritt's opinion along those lines. I know he means just what he says. He thinks he is right. He has an idea the people in New York are different from the people in any other part of the world. (Laughter). But I want to tell you *folks are folks* the world over, and I disagree with Mr. Merritt. If I were in New York City and the New York Association asked me to write their bulletin for them, I would write just the kind of a bulletin I am writing in Dayton. Before I got through, I am sure you would not have to come to the national convention to get introduced to each other! That is not the way to have a local association. Suppose you have three hundred members. The National Cash Register Company has eight thousand people employed at its plant. It has thousands scattered all over the world. How do they keep them in touch with each other? Through their bulletin.

What I am telling you is based on actual personal experience with stuff I have put across myself. I have written stuff in political campaigns and I have been credited with helping to save our city government against the socialists and political machines. I have written articles for the newspapers, the candidates themselves, and the Citizens' Committee have told me were better than the stuff they pay thousands of dollars to get into the papers. I have used satire and humor. Dozens of the best business men in Dayton who keep scrapbooks of things which interest them have told me they put in their scrapbooks everything I write. I am saying that to prove my point. If you will get out and do these things, you will find it will work. You said yourself they did not know each other.

You must use a little judgment, of course. Any high-class comedian on the stage will tell you comedy is a serious thing. You must know your people and play up a certain man along certain lines. We have some people in our Dayton Association who do not lend themselves to these jests, and you very seldom see their names mentioned along those lines. You must catch a fellow and get acquainted with him and see how he fits into a certain kind of play-up, and play him up along those lines. You cannot make something real out of something that is unreal. Take our friend Brooksey, there. The things I say about him fit in. They are not true, of course. (Laughter). He lends himself to what I say about him. He takes it good-naturedly. Study your members and play them up along those lines.

The point I make is this: To get life into our associations, local and national, we must make each man acquainted with the

other fellow. We cannot always come together at conventions, but we can keep this thing up year in and year out.

I will ask Mr. Connaly to tell you what he said about that very thing this morning.

THOMAS CONNALY, Atlanta: I told Mr. Rowe that I never had seen a lot of these fellows but I knew they were there; that I had never seen George Washington or Abe Lincoln, either. (Applause).

EDWARD M. APPLEGRATH, San Francisco: I have heard lots of people say when they open a morning newspaper, the first thing they turn to is the funny page; but it does not do them much good. I think we should consider the function of the bulletin. It is simply a tool in the hands of the organization for the purpose of helping to accomplish a certain result. What is that result? To better the condition of office building investment throughout the country. We do not want to shut our eyes to that fact. To judge the value of a bulletin, we should judge the way in which it tends or helps to accomplish that result.

I think we are liable to confuse the two issues. Mr. Rowe said a bulletin should be such and such. Perfectly true. Take the National Bulletin. What we want to do is to increase the efficiency of office building operation and production—the return. In order to do that, there are always certain facts that will help to lead the reader to conclusions that will be beneficial. I think a bulletin should be used in that way. I do not think you can lay down any definite policy—any definite idea.

With my people, they would not stand for the kind of bulletin Mr. Rowe puts out because we have too many diversified minds in an organization of seventy-three people. Some people think seriously. I have secured a speaker for a meeting, and one fellow would say, "That fellow is fine!" and the next man would greet me with, "What did you bring that fellow here to talk to us for?"

I know what I would get from some of those fellows if I published that kind of a bulletin. Behind everything there is always a certain amount of meat. There is no question but getting people together and getting them acquainted is the best thing in the world. But when you get them acquainted, you must not stop. You must keep on doing something else and getting results along the line for which your Association is organized. I think we should keep that in mind more than anything else. (Applause).

CHARLES S. HOLBROOK, Portland: From this discussion, it appeals to me we should be on our guard against over-extremes. We do not want to laugh ourselves to death every time we see the bulletin, nor put life entirely on a square-foot basis. (Applause).

PRESIDENT COLEY: What Mr. Merritt and Mr. Applegarth have said might to the outsider seem disparaging remarks to your plan of a bulletin. I repeat that I still think your plan is the thing to submit to an unorganized group. They may not deliver the goods based on that formula of yours, but it gives them something to start from, and then they can develop their bulletin as their local situations demand. (Applause).

CHAIRMAN ROWE: I think I see some advantages in not being a paid secretary.

J. T. CURRAN, Seattle: It seems to me the main thing we are looking at is to make this association business a success. In order to make the National a success, we must first make the locals a success. One of the interesting things in connection with a bulletin, to my mind, is the different kinds of bulletins that come to our office. They represent the different localities and the different classes of men and the different ideas of the secretaries all over the country. I am a great admirer of humor, and with the other bulletins that come to my desk, I get Mr. Rowe's and read it with a great deal of interest. However, I do not think we can standardize in the United States any one type of Bulletin. I think the intelligence of the board of directors and the officers and secretary of each local association has probably been exercised on this question of the bulletin and the best method to follow for that particular association. I believe each association feels it is doing the thing the majority of its members desire, which will produce the best results.

In Portland, they like a weekly bulletin. In Seattle, we feel they like a monthly bulletin. If there is anything of particular importance that requires quick action, we issue a little special bulletin and get it hot off the griddle.

It is quite interesting and educational to hear this discussion on the bulletin. I believe every one of these associations is trying to do the thing it considers the best for its particular association. (Applause).

HAL D. CHAPMAN, New York: I have never known it to fail that the mention of a man's name fails to get attention—not necessarily humorous mention, however. Some men can write humorous stuff and others cannot. But the births in a family, and the men going fishing, and things about his business—there are many interesting personals that always get across. We try to get those things in and it is always successful.

J. C. LANGTRY, "Building Management," Chicago: My remarks would be something like Mr. Chapman's. As I see Mr. Rowe's point about his bulletin, it seems to me he merely uses the humor as a vehicle to get across the serious. We have found in Building Management that many subscribers say, "We turn to the "Sky Scrapper" section first," showing they are interested in the

personal items. I think it is a splendid way to get across the serious arguments. (Applause).

CHAIRMAN ROWE: Because I have emphasized the humorous point, do not misunderstand me. I do not mean to say you should make a joke paper out of your bulletin. I was bringing out that point because it is used so little, and I was trying to show you what you can do by using it. Our bulletins are business papers. We want to use them for business purposes. So is the N. C. R. a business paper. How do they get it across?

Don't forget there is more reading matter published today than ever in the history of the world—that people have more stuff to read. And don't forget for that reason if you want your stuff read, you must put something in that will make them want to read it. That's the point. You can get bulletins. You open your mail, look at a bulletin and see some figures and lay it aside. You are going to read it again. But do you? Time goes on and you do not read it. If there is something in it that tells you when you open it, "Here's something I do want to read, and I will take five minutes and read it," you get across with it.

I do not say they should make a Punch and Judy of it, but use enough to make the people read it. Down in Dayton you think we are different. We are only different because we have made ourselves a little different. Five years ago I do not believe our Dayton bunch was different from that New York bunch. I think we were perhaps as suspicious and withheld our co-operation and all that sort of thing as much as in New York. I am only mentioning New York as an illustration. The same thing is true in other large cities more than in the small. We had that same condition.

I will ask Mr. Brooks what he thinks the Dayton Bulletin has done for our Association in handling it the way we have?

CHARLES W. BROOKS, Dayton: My opinion of the Dayton Association might not be fair, because I can see the way other associations are getting along and the lack of personal touch. Our Bulletin really has brought everybody together, because you read about them and the humorous side and feel acquainted through that, if through nothing else. When we first came here I saw two different sets of New York fellows being introduced to each other. If they had read about each other in the bulletin in a personal way, I think they would have known each other without being introduced—automatically become acquainted.

Our Bulletin is read by all our members. They have to in self-defense, sometimes, to see how to "come back." I think it has done more to hold our organization together than anything we have. There is nothing can take its place. We have weekly luncheons. But the Bulletin really has broken the ice, and you have something to start out on. (Applause).

J. CLYDESDALE CUSHMAN, New York: I will say we got

members in the New York Association so fast we do not have time to meet them. It takes quite a while to get around the three hundred.

Speaking about what Mr. Merritt had to say as to the dignity of our bulletin, I wish to add there is another reason underlying that purpose, and that is we use the bulletin as a means of general publicity of the New York Association. It is sent to all of the New York newspapers. You probably have had a good deal of experience with newspaper editors and know they are prone to emphasize little peculiarities and get something on somebody if they can. We try to preserve a uniformity of dignity and present a business paper. We are engaged in a business, not a comedy, and I feel, with the other members of the New York Association, that should we depart from the strictly business atmosphere of our weekly bulletin, it would defeat the ends.

We have our means of obtaining comic reading. While I do not say this in criticism of your bulletin, I feel the exposing of personalities in our bulletin of business men engaged in a serious thing would present a very unfortunate result. I am sure we are following, so far as we are concerned, along the right direction. We have at times departed somewhat from the standard beaten track, and it has always been regretted. We have some criticism from various sources which has led us to believe a bulletin of a building managers' association, one of the greatest businesses in the world, should be conducted along lines the same as the office of a particular man who reads it is conducted. (Applause).

CHAIRMAN ROWE: I am sure we are glad to have had this discussion. I will say to the New York men that the biggest industries in the country are pursuing this policy, and they are certainly serious businesses. I do not think the National Cash Register, or the Dutch Boy Lead, or the Jeffrey Motor Company would be termed a business not serious, and they are all doing this work along these lines.

I thank you for coming together.

The meeting is now adjourned.

Meeting of the Associated Secretaries

JUNE 20, 1922.

The first meeting of the Associated Secretaries held during the Bedford Springs convention was on Tuesday, June 20, 1922, with Vice-President James J. Sayer, of Portland, acting as chairman.

CHAIRMAN SAYER: As Vice-President of the Associated Secretaries I will call this meeting to order in the absence of Mr. Thomas E. Bainbridge, of Chicago, whom I think you know has been ill and is compelled to rest for the next six months.

This is a meeting of The Associated Secretaries, the successor to the Secretarial Conferences which used to be held in connection with the general convention.

For several years there has been a feeling that the secretaries could profitably organize themselves in such a way as to yield the greatest usefulness to themselves and to the National convention. Heretofore the secretarial conferences have been open to anyone who was interested in hearing what the secretaries might have to say. This brought about such general discussions and a tendency to talk about all sorts and conditions of subjects, that our meetings developed into a minor national convention program.

At the Portland convention the organization of secretaries was formed. It was named The Associated Secretaries of the National Association of Building Owners and Managers. This is the first meeting, and is informal. Those who have already joined the Association have received notice that the annual meeting of the Association will be held tomorrow. This meeting today is to get together and get acquainted; see who is here, and plan the work for the week.

The Associated Secretaries' membership consists of all associations which are affiliated with the National Association. The Constitution provides two classes of membership. The active members of the Associated Secretaries are those whose local associations are affiliated with the National Association. The non-active and non-voting members are those secretaries of local associations which thus far have not affiliated formally with the National organization.

About a month ago I sent to all the members on our list an outline of the topics which the Board of Trustees thought would serve as the basis of our discussions at our meetings held during this convention. The outline is before you and the chairman will be pleased to receive suggestions concerning our future procedure or entertain any motions the members may wish to bring up.

FRED M. SCHAEFER, Atlanta: I wish to nominate three new members: T. H. Lynch, of New Orleans; H. G. Bishop, of Baltimore, and S. J. Latta, of Memphis.

These gentlemen were duly elected to membership.

ROLL CALL

The following members responded to roll call:

James J. Sayer, Portland.
C. F. Merritt, New York.
F. B. Bicknell, Cleveland.
J. T. Curran, Seattle.
Fred M. Shaefer, Atlanta.
H. G. Bishop, Baltimore.
S. J. Latta, Memphis.
John A. Olson, Minneapolis.
Edward M. Applegarth, San Francisco.
John Kesselring, Louisville.
L. B. Ermeling, Executive Secretary, Chicago.
L. V. DuBois, Cincinnati.
Thomas F. Egan, Philadelphia.
Cyrus A. Hackstaff, Denver.
D. M. Rowe, Dayton.
A. Roy Heath, Salt Lake City.
H. J. Gould, Buffalo.
T. H. Lynch, New Orleans.

F. B. BICKNELL, Cleveland: I move the Secretary send to Mr. Bainbridge the heartiest greetings of The Associated Secretaries, our love and best wishes, and the hope he will soon be with us again.

The motion was seconded and carried.

C. F. MERRITT, New York: I offer this amendment: To amend Article 6 of the By-Laws to read as follows:

"The management of the Association shall be vested in an Executive Committee consisting of the officers of the Association, together with three regular members elected at large in the same manner as the officers."

The only change is in the word "three."

The motion was seconded and carried.

CHAIRMAN SAYER: I think perhaps we might get acquainted with each other and with each other's organizations at this time, unless there is other business. It might be of value if we knew a little about the kind of organizations we represent. If you will take this statement and begin with the first suggestion, which is intended to bring out in a brief way those facts. Kindly answer these questions as I call the roll by cities.

SEATTLE

J. T. CURRAN: Our Board of Trustees was originally made up of twelve, four of whom are elected each year and hold office for three years.

The officers are President, First Vice-President, Second Vice-President, and Treasurer. These officers are elected every year

by ballot. The Secretary is a salaried executive and is elected each year after the new Board of Trustees take office. I might also say that our By-Laws provide each ex-president becomes automatically a member of the Board of Trustees, so that our Board of Trustees, including our elective officers, at this time comprises twenty.

Membership is based on the assessed valuation of the property at a rate determined by the Budget Committee which meets the first of December of each year; and in addition to the rate fixed by this Budget Committee, we provide for a flat ten dollars per member which goes to the National Association in payment of dues.

Our Association is limited to owners and managers. A broker can be admitted if he represents some specific property upon which he pays the assessment dues, plus ten dollars. At the present time our apartment house owners are not members of the Association. We are considering the advisability or possibility of forming an apartment house members association as an adjunct or subsidiary association in connection with the work of our own.

We amended our By-Laws so that we are not limited by geographic district.

Our Association is sustained by the assessment, plus the flat ten dollars per annum payment of dues.

CLEVELAND

F. B. BICKNELL: Our Board of Trustees is made up of the President, First and Second Vice-President, Treasurer, and five additional members. They are elected annually, our present annual meeting taking place the second Tuesday in April each year. We propose to change our fiscal year to correspond with the calendar year. The Secretary is elected by the Board of Trustees. He is a salaried executive.

The membership in the Association is based on prorated representation. We do not discriminate against a broker if he represents property within the confines of the district within which our Association operates. Our present set-up provides for properties within what we term the "central business district." That is an elastic term, but in Cleveland it includes what we term the "downtown" properties. We are considering broadening the scope of the district to take in properties in business centers in other sections of the city.

There has also been some discussion as to the taking in of apartment houses. Neither of these additional membership plans has as yet been determined upon.

The sustaining of our Association is entirely on an assessment plan, which is limited to an assessment of one-fiftieth of one per cent on the total tax valuation of each member property. We have never exceeded that limitation and have never called an extra assessment; and at no time could we exceed that without

action of the Association. We have no regular dues. Originally we had dues of ten dollars per property. The change was made two years ago whereby we waived the collection of dues, so that our entire budget is provided by assessment.

L. V. DuBois, Cincinnati: You have minimum dues?

MR. BICKNELL: Only maximum.

MR. DuBois: Suppose the property came in under \$50,000?

MR. BICKNELL: We have very few of those.

MR. DuBois: If you include apartment houses, you will get a number of them.

MR. BICKNELL: If we add an apartment house section, we would have a different basis.

NEW ORLEANS

T. H. LYNCH: The New Orleans Association is very much in its infancy. We have spent considerable time in getting organized, and have had but four meetings since organization. I think we are on our feet.

Our officers are made up of President, Vice-President, and myself as Secretary and Treasurer. We have two directors, which constitute the Board of Trustees. We have an assistant secretary who is the only paid employee. He does the major portion of the work.

Our dues were fixed at \$25 from our first meeting, held in March, until October first, which we plan to make our fiscal year. When we voted for affiliation with the National, we saw this \$25 would not take care of the necessary dues to the National, so we made an additional assessment to cover dues in the National.

Membership is limited to building owners and managers. New Orleans is not an apartment house town, so we have not encountered that phase of it at all.

Our Constitution and By-Laws provide only for members in the City of New Orleans. Any office building in the city may belong. We have thirteen members at present, with three more buildings eligible. There are no prospects of new buildings for three or four years.

PHILADELPHIA

THOMAS F. EGAN: The Philadelphia Association is incorporated under the laws of Pennsylvania. The Board of Directors consist of President, Vice-President, Secretary, Treasurer, past President, and eight directors, four of whom are elected each year to serve for a term of two years. The Secretary is not salaried. He is one of the members. There is a salaried executive secretary.

Membership is based on property qualifications, and limited to owners and managers of buildings. It includes real estate brokers if managers of buildings, only. The building qualification is not expressed in the By-Laws, except it says "large buildings." There is no building in the organization under 20,000 square feet, which would eliminate real estate brokers coming in

who own small buildings as an excuse. We have several real estate brokers in the organization, and they make mighty good members. There are no apartment house owners or operators in the Association at the present time. We have not considered admitting them. The only geographical limitation is Philadelphia.

The Association is sustained by regular dues.

MR. MERRITT: What are the dues?

MR. EGAN: Twenty-five dollars a year.

LOUISVILLE

JOHN KESSELRING: We have an Association consisting of eighteen members. Our Board of Directors consist of five members—President, Vice-President, Secretary-Treasurer, and two others. The Secretary is salaried.

Our membership is personal, or individual. In cases where we have two men from the same office, both pay dues and membership fees, and but one payment on the building. We have owners and managers of office buildings and apartment houses.

It is not limited by geographical district.

We are sustained by membership fees, which in our case is \$20, and dues of \$10 a year, and the assessment according to the city assessment. Last year it ran about one-twentieth of one per cent. We make our assessment from our budget.

THE CHAIRMAN: Will you explain your affiliation with the Real Estate Board?

MR. KESSELRING: In our case, the Secretary of the Real Estate Board is also Secretary of the Association of Building Owners and Managers. The Real Estate Board pays 75 per cent of the expenses and our Association pays 25 per cent.

DENVER

CYRUS A. HACKSTAFF: We have a Board of Directors consisting of five members, the three officers and two elected members. The elected members are elected alternately so they serve in different periods. The Secretary is not a salaried man.

Membership is based on personal qualifications. It is limited to owners and managers of office buildings. Our property is controlled by realtors to a great extent. Apartment house owners are not admitted.

There are no limitations geographically.

It is sustained by regular dues of about \$22.50 a year. No assessment except this last National assessment which we all paid. We based that on a property valuation.

CINCINNATI

L. V. DuBois: The Board of Trustees consists of four officers—President, First and Second Vice-President, and Secretary-Treasurer—and five members at large. The executive secretary is salaried.

Membership is based on property qualifications of the building owner or manager. Brokers we understand as real estate men. We have a company that controls five of the largest office buildings in the city. Mr. Smith has five men of his organization represented in the Association. We have an apartment house just recently started which is eligible to membership and on this account the association has limited the voting power to units of \$100,000 of the assessed valuation or a major fraction thereof. We have 476 apartment houses in our city consisting of four or more flats to the building.

Some time ago we decided to enlarge the activities of the Association by admitting apartment houses. Taking in a number of apartment houses would diversify the interests. A number of the members thought there should be a proportionate voting proposition—say there is one vote for each \$100,000 valuation in the Association, or fraction thereof. At least 90 per cent of the apartment houses in Cincinnati are under \$100,000 valuation. For such questions as re-routing the car lines, where it would be of benefit to the down-town property interests, we thought it better to have a pro rata voting scheme.

The geographic limitation is Cincinnati.

The Association is sustained solely by an assessment of twenty cents per thousand of the tax valuation per year.

SALT LAKE CITY

A. ROY HEATH: We have in Salt Lake an organization consisting of twenty-three members. It is controlled by a Board of Directors including the three officers—President, Vice-President, Secretary-Treasurer—and two other members elected at large—supposed to be elected by vote, but they have not been recently. We are going on three years old. The Secretary is not paid.

We take in anybody who wants to be a member—any man who owns real estate in the city we will gladly take in. We have one or two real estate brokers and apartment house owners, but our Association consists mostly of building owners and managers.

Our dues are \$25 a year flat. Out of that is paid the membership fee of the National Association. We do not have much left.

MEMPHIS

S. J. LATTA: Our organization has been functioning for such a short time, and not knowing what was expected, I did not bring any written data. We have a President, Vice-President, Secretary and Treasurer; also an acting secretary who is the only paid one of the lot—a lady.

Our dues are \$20. We find that inadequate and are going on the assessment plan at once.

Our activities are confined to office buildings.

BALTIMORE

H. G. BISHOP: Not having been a member of the Associa-

tion and not expecting to answer these questions, I can give you only limited information. We have an Association of twenty-three members. Our officers are President, Vice-President, Secretary and Treasurer, none of whom are paid.

Our membership is based on what you might term a personal basis. It consists almost entirely of building owners and managers. We have two or three brokers and three apartment house men. The Real Estate Exchange is a strong organization and co-operates with us on every occasion.

Our membership is limited by the geographic confines of the city and sustained by regular dues, and an assessment when needed.

MINNEAPOLIS

JOHN A. OLSON: Not being the Secretary of the Minneapolis Association, that office being held by Mr. Bruce, I do not have all the data, but I will give you all the information I can.

Our Board of Trustees consists of four officers and three members at large. Our Secretary is not salaried.

Membership consists of building owners and managers. Brokers are allowed, if managers of office buildings. We also have some apartment house owners.

Membership is limited to the City of Minneapolis. Our dues are regular dues of \$15 per year. We are not affiliated with the Realty Board.

DAYTON

D. M. ROWE: We have twenty-eight members in our organization. We elect our officers once a year—President, Vice-President, and Secretary-Treasurer. In addition to these officers, our Board of Directors also consists of four members elected at the same time as the officers.

The Secretary is paid but not salaried—paid by love and affection.

Our membership is based on personal qualifications. A member must be a manager of an office building or a business building in the central part of the town, not confined to Class A buildings. Brokers are not admitted as such. A broker who represents a building is admitted on that basis. It is limited to the owners and managers. Apartment house operators are admitted, provided they also manage a business property in the central part of town. Quite a number of our members—for instance, the Dayton Savings and Trust—has a real estate department which manages property, including apartment houses. It is limited to the business district.

It is sustained by regular dues. Our membership dues are \$20, \$10 of which go to the National Association. We also have provided for associate members. A building which is represented by a regular member paying full dues, may also have one or more associate members paying \$10. The associate member is not a

member of the National Association. He has no vote, but may enter into the deliberations on any question that arises.

SAN FRANCISCO

EDWARD M. APPLGARTH: We have a Board of Directors of nine, four elected one year and five the next. They elect the officers. We have a salaried Secretary.

Membership is based on property qualifications, limited to owners and managers of offices and loft buildings. Brokers are admitted if they operate buildings. Apartment houses are not. We have a separate association for them.

There is no geographic district except San Francisco.

Our Association is sustained by the assessment dues. We have five cents on land valuation, forty-five cents on improvement valuation, and \$18 membership fee.

ATLANTA

FRED M. SCHAEFER: We have a Board consisting of President, Vice-President, Treasurer, and six Executive Committeemen. The annual election is the first Tuesday in January, at which time officers are elected for one year, and three executive committeemen for two years, thereby electing three executive committeemen each year. The Secretary is salaried.

Membership is limited to owners and managers of office buildings and apartment houses. At present we have only office building men. Our dues are based on the city assessment of property of the previous year. In 1922, they are based on 1921 city tax assessment, which is one-twentieth of one per cent, or fifty cents per thousand dollars.

We have twenty-three members.

NEW YORK

C. F. MERRITT: New York is a voluntary organization. We are not incorporated. We elect each year the President, Vice-President, Secretary and Treasurer. We have an Executive Committee composed of nineteen members. Four are the officers and the remaining fifteen are elected each year in groups of five for a term of three years.

Membership is a personal one. We have managers from apartment houses, loft buildings, and office buildings. We have one or two brokers—by that I mean one who negotiates sales and leases without management. There is an unwritten law that a man to enter must be actively engaged. We had two or three previously enter who now probably would not be eligible.

We have active and associate membership. The active memberships are held by those actively engaged in management, and the associate members are those interested in management, but probably already represented. We have 28 associate members represented one way or another.

The dues are \$50 a year for active and \$25 for associate members. We have no assessment. We have 276 members.

PORTLAND

JAMES J. SAYER: The Portland Association has thirty property membership. Each membership may represent more than one piece of property under one ownership or management. We are incorporated. We elect three members of the Board of Trustees each year for terms of three years. The President is elected for one year from the membership at large and becomes a member of the Board of Trustees. The Vice-President and Treasurer are also elected for one year from the membership at large. The Secretary is both a salaried executive and the Corporate Secretary.

Membership is based on property qualifications. It is limited to owners and managers, although brokers would be admitted if the major part of their business were the ownership or management of property. No apartment house properties are a part of the Association, although several of our members own apartment houses.

Membership is also limited geographically to the down-town district—twelve by six blocks.

The activities of the Association are sustained by assessment based on the tax valuation, exclusively. There are two rates of assessment. Owners and operators of office buildings pay full basic assessment. Owners of general property pay one-half of the regular rate. We have had a great deal of trouble bringing into our membership general property owners. They are very conservative and after attending our meetings occasionally, have said: "You discuss simply building management." In order to interest them in our tax and general property welfare work we have made this arrangement of a half rate, which applies to every membership which owns other than office buildings. Our outlay is based upon a budget approved by the Board of Trustees each year.

MR. BICKNELL: Did you change your membership to the present differential plan?

MR. SAYER: Yes, originally the members contributed on the same basis. In order to hold certain memberships, we changed to this differential plan.

MR. ROWE: I want to emphasize the fact that the 28 members I mentioned are all active members—members of the National Association. I did not include associate members.

MR. LYNCH: We are out to learn all we can. I am asking something from which I think I will derive the greatest benefit. If any secretaries would like to exchange bulletins, I am in the market for exchange. I have not received any bulletins except Mr. Schaefer's.

MR. APPEGARTH: I would like to suggest we take up with "Building Management," the question of its keeping its published list correct and up to date. I send bulletins to everybody on that list.

MR. ROWE: I would like to receive bulletins from all associations that issue them.

MR. SCHAEFER: I am like Mr. Applegarth. I take the list as published in "Building Management." If I have omitted any, I would be glad to know it, as I wish to send the bulletin to every one.

MR. CURRAN: I believe every one here should follow the suggestion made by Mr. Applegarth and check up with the representatives of "Building Management" who are here and follow up this bulletin matter. You will find in doing this, especially the newer members of the Associated Secretaries, there are many things that will come up which will surprise you in the way of something which affects your own problems. We owe it as a duty to each other as members of this Association to watch those things closely. A while back Dayton was in trouble on the sidewalk tax. I think there were several secretaries who got busy with Mr. Rowe and furnished him such information as they had available which might be useful to him in his fight.

MR. KESSELRING: I would like to learn upon what basis apartment owner members are charged in associations where they are admitted? Is there any difference made between an apartment house representative and an office building owner or manager? We only have one apartment house man in our Association. By general agreement we assessed him at something less than the building owners pay.

MR. DUBOIS: We have a minimum charge of \$12. Apartment buildings come in under the same provision.

MR. SCHAEFER: Our minimum dues are \$50. We charge an initiation fee of \$10. If a building is only assessed at \$50,000, it pays \$50 just the same. I guess that is one reason we had no applications from apartment houses, because there are few who want to pay the dues.

MR. MERRITT: We have a large membership of apartment house men and make no distinction.

MR. APPLGARTH: I want to suggest to members who get out bulletins that they send their bulletins to the complete list as published in "Building Management," irrespective of whether they receive any in return or not. That will tend to the getting out of more and more bulletins, and it gives an acquaintance with the other fellow. You begin to know there is such a town or person, and you are liable to call on him when something comes up.

In receiving my bulletins, sometimes you will find missing pages. That is because the omitted pages contain something we have taken from other bulletins.

THE CHAIRMAN: The formal annual meeting is called by the Secretary for twelve o'clock tomorrow.

Adjournment.

MEETING OF THE ASSOCIATED SECRETARIES,
CONTINUED ON JUNE 22, 1922

The Associated Secretaries met at luncheon in the private dining-room of the Bedford Springs Hotel on Thursday, June 22, with Vice-President James J. Sayer, of Portland, acting as Chairman.

THE CHAIRMAN: This is the annual meeting of the Associated Secretaries called for ten o'clock Wednesday, and adjourned until this noon.

Upon motion, the reading of the minutes of the last meeting was dispensed with.

THE CHAIRMAN: I have here a letter from President Bainbridge, which I will present at this time. (Reads.)

Chicago, June 15, 1922.

To Vice-President James J. Sayer, and Members of the Associated Secretaries—Gentlemen:

In a few days you will be assembled in your second annual conference. I am sure you know my regret at not being able to be with you, and to participate in the program of discussion so excellently prepared. As matters stand, I am still under a prolonged rest treatment which, while not seriously uncomfortable, is becoming more or less tiresome because of its duration. It must, however, be continued for several months yet and much of this time must be spent in bed.

In sending you my greetings and best wishes for a successful conference, I am impressed with the thought that "The Associated Secretaries" has as an organization made definite, if not great, progress during the past year. I believe the preparation and issuance by Secretary Merritt of the Monthly Summary of local association activities and legislative problems has indicated that this is a worthwhile digest of real service to all of us, and the sort of thing we have long wanted; and that the little effort necessary in contributing information to the Secretary's office has given a very satisfactory result. This Summary has possibilities in it which I am sure will be more evident as time goes by.

I believe the past year has also seen a friendlier contact between the various association secretaries, and an even freer interchange of information and courtesies between them. This is due, I think, to the closer feeling that results from having our own organization, and I congratulate all of you again on the happy event at Portland when, under the good influences of Secretary Sayer, we completed the formation of "The Associated Secretaries."

The Secretary-Treasurer's report will show a membership of our organization that is representative of the general status of local association development throughout the country. Eventually there will be more associations and likewise more professional secretaries. With this will come increased growth and strength for "The Associated Secretaries," and an augmented functioning and service to the individual members.

I wish you all a most successful and enjoyable conference, and assure you that if obeying the doctor's orders will accomplish the proper health result, I will be with you at the third annual conference next year.

Cordially yours,

T. E. BAINBRIDGE.

REPORT OF SECRETARY-TREASURER

C. F. MERRITT, NEW YORK CITY

To the Associated Secretaries of The National Association of Building Owners and Managers, Bedford Springs, Pa:

As the first year of the existence of "The Associated Secretaries of The National Association of Building Owners and Managers" has now just closed, I wish to submit herewith my annual report as Secretary-Treasurer.

During the past year there has been sent out from this office 70 letters on strictly Association matters, not counting replies to local secretaries asking for information from the New York Association. These I considered do not fall within the scope of this report.

Two circular letters have been sent out to secretaries of the local associations soliciting membership—the first in September, 1921, to about 50 secretaries and the second in May, 1922, to 26 secretaries. As the result of the first letter, the following men qualified as charter members:

I. C. Allen.....	Active	M. Dunn.....	Active
E. M. Applegarth.....	"	L. B. Ermeling.....	"
T. E. Bainbridge.....	"	B. F. McLouth.....	"
F. B. Bicknell.....	"	C. F. Merritt.....	"
E. L. Bruce.....	"	J. J. Sayer.....	"
J. T. Curran.....	"	F. M. Shaefer.....	"

and the following men are subsequently elected to the respective memberships:

L. V. Dubois.....	Active	C. A. Hackstaff.....	Active
T. F. Egan, Jr.....	Associate		

The May letter brought no response.

We now have 14 active members and 1 associate member. Of these 13 are salaried and 2 volunteer secretaries.

During the year mimeograph copies of the papers read at the meeting during the convention last June by Mr. J. T. Curran on "Issuance of Propaganda Literature by Local Associations," and by Mr. F. B. Bicknell on "The Functioning of a Local Association in Tax Matters"; a copy of the By-Laws and a monthly summary of the activities of the local associations were sent out to the members. The summary was not started until March.

A list following shows present membership with association connected and official capacity:

ACTIVE

- Allen, I. C.—Oakland Building Owners and Managers Association. Secretary. (Volunteer).
Applegarth, E. M.—Building Owners and Managers Association of San Francisco. Secretary. (Salary).
Bainbridge, T. E.—Building Managers Association of Chicago. Secretary. (Salary).
Bicknell, F. B.—The Cleveland Association of Building Owners and Managers. Secretary. (Salary).
Bruce, E. L.—Minneapolis Association of Building Owners and Managers. Secretary. (Volunteer).
Curran, J. T.—Building Owners and Managers Association of Seattle. Secretary. (Salary).
DuBois, L. V.—Building Owners and Managers Association of Cincinnati. Secretary. (Salary).
Dunn, M.—Louisville Association of Building Owners and Managers. Secretary. (Salary).
Ermeling, L. B.—National Association of Building Owners and Managers. Secretary. (Salary).
Hackstaff, C. A.—Office Building Owners and Managers Association of Denver. Secretary. (Volunteer).
McLouth, B. F.—Business Property Owners and Managers Association of Los Angeles. Secretary. (Salary).
Merritt, C. F.—Building Managers and Owners Association of New York. Secretary. (Salary).
Sayer, J. J.—Portland Association of Building Owners and Managers. Secretary. (Salary).
Schaefer, F.—Atlanta Association of Building Owners and Managers. Secretary. (Salary).

ASSOCIATE

- Egan, T. F., Jr.—Building Owners and Managers Association of Philadelphia. Secretary. (Salary).

TREASURER'S REPORT

Receipts

15 Members, at \$5.00 each.....\$75.00

Disbursements

Sept. 8, 1921, stamps.....\$2.00
 Oct. 29, 1921, book......45
 Nov. 1, 1921, E. Kimpton & Co..... 20.75
 Mar. 24, 1922, stamps..... 1.00
 Apr. 26, 1922, stamps..... 1.00
 May 24, 1922, stamps..... 1.50
 May 26, 1922, B. M. & O. Asso. of N. Y. (for
 stationery) 4.13—\$30.83
 CASH ON HAND—June 17, 1922..... 44.17— 75.00

Respectfully submitted,

(Signed) CHARLES F. MERRITT,
 Secretary-Treasurer.

F. B. BICKNELL, Cleveland: I move the report of the Secretary-Treasurer be approved.

The motion was seconded and carried.

ELECTION OF OFFICERS

The Chairman asked for nominations from the floor.

LEWIS B. ERMELING, Chicago: In view of the fact it takes some time for an organization to get under way, it seems to me it would be the right thing to do to re-elect the officers who served us during the past year. While it is true after an organization gets under way you want to rotate, while you meet but once a year, it takes some time to get under way. I nominate the present officers for re-election.

The motion received several seconds, and carried.

It was moved a unanimous ballot be cast for the present officers to succeed themselves for the ensuing year,

The motion was seconded and carried.

EDWARD M. APPLGARTH, San Francisco: I move we nominate another member of the Executive Committee to fill the requirement of the amendment passed at this meeting.

The motion prevailed, and Fred M. Schaefer, of Atlanta, was duly elected to fill such position.

NEW BUSINESS

MR. ERMELING: Has the continuation of this Information Bulletin been considered—the service gotten out by Mr. Merritt as to what is being done in various cities?

MR. MERRITT: If the men want it, I will be glad to continue it. It is automatic now.

THE CHAIRMAN: In regard to Mr. Ermeling's suggestion as to the survey and questionnaire each month, it is understood

that will be forwarded automatically to all members. I consider it a very valuable feature.

J. T. CURRAN, Seattle: I would like to ask if any of the members has any ideas as to some particular resolution that he would like to have brought before the National Convention? Mr. Whitcomb, as Chairman of the Resolutions Committee, is working on that now, and I am sure he would be glad to hear from you.

MR. BICKNELL: While we, as an organization, are without the pale of the National Association as such, I am wondering if it would be out of place—whether it would be inopportune for us either to request or file with the Resolutions Committee a resolution asking that when the National Committee builds its program for next year that the members arrange the program so that our organization might have an opportunity to function without conflicting with the Convention program. We, as secretaries, feel that we should attend all of the meetings of the Convention. In doing this, however, because of the multiplicity of other meetings, we are prevented from meeting together in strictly secretarial conferences. This meeting is a good illustration of the point I wish to make. This is but the second meeting we have been able to hold this week, and we feel that getting together as secretaries we could accomplish much good for our own official usefulness. My suggestion is not made in a critical sense, but possibly we could pass on the National Committee, in the proper way, a suggestion as to this Association functioning, and the statement that we, as secretaries, want to increase our helpfulness to the National Association. I am wondering if the program next year can't be built with that thought in view?

EDWARD M. APPLLEGARTH, San Francisco: I think we should not ask the National Association to hold two hundred members doing nothing so that twelve of us can get together and talk. I think we should either stay one day longer or come one day earlier, and use that one day exclusively for the secretaries' meetings. I offer that suggestion.

FRED M. SCHAEFER, Atlanta: I agree with Mr. Applegarth in that idea. I think it is a good suggestion. We would hate to suggest that they devote a day to hearing eighteen secretaries discuss their business. I think it is not a bad idea to remain a day longer and spend the entire day in our proceedings.

SECRETARY MERRITT: I can see difficulties. If we would travel any great distance, we would have a party or a special car probably going both ways, which would mean the secretaries would either have to travel alone going or wait over afterward. As a rule, we are all anxious to get back at the end of the session. I doubt very much if it would be practicable for us to stay over a day. I know I could not do it this time.

I would suggest the President or Vice-President confer with the President of the National Association and see how we might

fit in with the program. I think a practical plan can be arranged by some mutual understanding at the time the program is formed without necessarily compelling the entire National Association to wait while we have our meeting. Possibly while they are on some pleasure jaunt we might transact our business. We may have to sacrifice some sight-seeing trip to work in our meetings.

D. M. ROWE, Dayton: I agree with Mr. Merritt. I know if I were going to a convention and knew a bunch of the Dayton boys were going too, I should not care to go by myself. I should not want to travel either way by myself.

CYRUS A. HACKSTAFF, Denver: We should have some time for our meetings. Perhaps the first day of the Convention would be best.

MR. SCHAEFER: We threw away one day here.

MR. APPLGARTH: I think we may leave this to the Executive Committee to see what can be done before the time for the next Convention.

THE CHAIRMAN: I will appoint Mr. Bicknell as Chairman of the Committee to make a report to the National Convention.

A. ROY HEATH, Salt Lake City: I think if the program for the secretaries' meetings were printed with the National program, it would help a great deal.

MR. APPLGARTH: There are many things on this list of topics Mr. Sayer has prepared that I would very much like to hear discussed; but I do not think we could attempt to try to discuss them today. I believe another meeting for the purpose of discussing some particular subject would be a good thing if we can get the time.

I move the President be instructed to arrange another meeting, provided we can squeeze it in without interfering with the time we want to spend in the Convention.

The motion was seconded.

The motion prevailed and adjournment was declared until 5 p. m. on Friday.

NOTE: Owing to the press of business of the National Association and the change in plan to close the main Convention Saturday at 1 p. m. instead of Saturday evening in accordance with the published program, the adjourned meeting was not held and the temporary adjournment was made permanent. J. J. S.

Apartment House Luncheon Conferences

During the various meetings of the Conference the following attended:

A. D. Wilson	Denver, Colorado	1022 Foster Bldg.
Eugene N. Fritz	San Francisco	Casa Madrona Apts.
C. F. Schmidt	Indianapolis	755 Century Bldg.
Chas. Geiger	Dayton, Ohio	c/o The Dayton Savings & Trust Company
J. W. Bamford	Pittsburg, Pa.	Westinghouse Bldg.
C. C. McKallip	" "	C. C. McKallip & Co.
O. D. Dike	New York City	220 West 42nd St.
H. L. Eckersen	" " "	46 Cedar Street.
Chas. E. Forster	" " "	342 Madison Ave.
E. K. Van Winkle	" " "	152 West 72nd St.
Wm. S. Cornu	" " "	" " " "
E. Everett Thorpe	" " "	175 West 72nd St.
W. J. Palmer	Omaha, Nebr.	Keeline Bldg.
John H. Hall	Cincinnati, Ohio	Thos. Emerys Sons
Alfred C. Kennedy	Omaha, Nebr.	c/o Peters Trust Co.
E. B. Arnold	Cleveland, Ohio	1113 Citizens' Bldg.
F. B. Bourland	Peoria, Ill.	215 Central National Bank Building
W. E. Whittlesey	Davenport, Iowa	804 Putman Bldg.
J. H. Aronson	Pittsburg, Pa.	900 Union Arcade
Leo J. Sheridan	Chicago, Ill.	c/o S. W. Straus & Co.

TUESDAY SESSION

The first Apartment House Conference was held Tuesday noon, June 20th. The meeting was called to order by A. D. Wilson, Chairman of the Conference. Mr. Alfred C. Kennedy acted as Secretary. Mr. Wilson stated that the following subjects had been suggested for discussion:

- Present vacancies and renting conditions.
- Leases and forms.
- Legislation.
- Rental rates per room.
- Methods of handling bad accounts.
- Service rendered.
- Depreciation.

Mr. Van Winkle of New York opened the discussion by telling of the Rental conditions in that City. He stated that contrary to the usual custom of signing leases for the Fall during the months of May and June, the tenants are holding off—stating that the prices are too high and must be reduced. He suggested

that some concessions might have to be made to tenants in order to get them to sign leases. After speaking briefly on the experience of the New York Owners and Managers with the Rent Laws, he explained that for repairs, the higher class Apartments were rented on a three-year basis and the Owner figured on the redecorating not to cost more than the amount of $2\frac{1}{2}$ to 3 months' rent. On a one-year lease they limit the redecorating cost to 1 month's rent. Mr. Van Winkle stated that he expected an increased demand in the Fall, and he would like to know what was the experience of the others present.

The discussion on Rental Conditions was continued around the table. Mr. Forster of New York stated that very few leases were closed, but he expected conditions would improve by September first. Mr. Eckerson remarked that he thought the tenants' attitude was caused by the propaganda started to reduce rents. Mr. Dike confirmed what the other New York men had said about conditions.

Messrs. Bamford and McKallip reported that conditions in Pittsburgh were good and practically all Apartments leased.

Mr. Geiger of Dayton stated conditions in Dayton were good and that at present there were very few vacancies.

Mr. Arnold stated there were 7,000 vacancies in Cleveland and that some Owners were offering 3 months free rent in their advertising. That rents were being reduced and that in some buildings rents have been reduced three times in the last few months.

Conditions in Indianapolis as reported by Mr. Schmidt were favorable with almost no vacancies.

Mr. Fritz of San Francisco stated that Rental scales were based on replacement cost and there were very few vacancies.

Mr. Wilson reporting for Denver, said that there were vacancies to the extent of about two per cent and that conditions were favorable because the buildings were handled by strong agencies.

Vacancies in Omaha amounted to probably five per cent, but it was expected that all these would be absorbed by October first, according to Mr. Alfred C. Kennedy.

Mr. Hall of Cincinnati reported no vacancies, and Mr. Palmer spoke further, about conditions in Omaha.

The meeting then adjourned.

THURSDAY SESSION

At the Thursday noon luncheon, June 22nd., Chairman Wilson presided. Mr. Hall of Cincinnati led a discussion of "Rules and Regulations of Apartment Buildings."

The Nominating Committee, consisting of Mr. Fritz, Mr.

Thorpe and Mr. Kennedy, reported the following nominations for officers of the Conference for the coming year:

W. J. Palmer	Omaha	Chairman
C. F. Schmidt	Indianapolis	Secretary

It was moved by Mr. Van Winkle, seconded by Mr. Hall that the Secretary be instructed to cast a unanimous ballot for Mr. Palmer and Mr. Schmidt. The motion carried.

Mr. Fritz asked then for information as to advertising methods—how to get tenants. This discussion went around the table.

The meeting then adjourned.

FRIDAY SESSION

Mr. Wilson, as chairman, called on Mr. Kennedy to report on the Apartment House Operating Experience Exchange as conducted by the Omaha Association.

It was suggested that the next administration be requested to carry on this work and extend it to the National Association.

Mr. Sheridan then reported on Rental Conditions in Chicago. He stated that whereas there was an acute shortage of Apartments a year ago, the most careful estimates of present conditions placed the amount of vacancies at between 12,000 and 15,000. In some cases new buildings were making concessions of free rent. This was true largely in the case of buildings for sale. He spoke briefly on the Straus plan of financing. He stated that they regarded the kitchenette Apartments as dangerous.

The Conference then adjourned until the next annual Convention.

ALFRED C. KENNEDY
Acting Secretary.

Appendix I

Elevator Code of Baltimore

New Law Enacted Under Leadership of Building Owners and Managers' Association.

The City of Baltimore has a new Elevator Code regulating the installation and operation of all passenger and freight elevators, dumb elevators, construction and building hoists. This new law recently passed the City Council of Baltimore, receiving the signature of Mayor Broening on June 16th, 1922, the final action enacting this new law.

Recognized as the most advanced and constructive form of legislation so far enacted by any city in the United States, the new Baltimore Elevator Code owes its development and form to the initiative of the Building Owners and Managers' Association of Baltimore.

Pressure of public opinion had stirred the City authorities of Baltimore in the Fall of 1921 to prepare more stringent elevator regulations. A new Code was hurriedly thrown together to meet this emergency. At this state President A. E. MacBride of the Building Owners and Managers' Association of Baltimore called a joint conference of his Association with the local chapter of American Institute of Architects, the Builders' Exchange, the Real Estate Board, the Merchants and Manufacturers' Association of Baltimore, the casualty insurance companies with headquarters in Baltimore and the local Hotel Men's Association, at which this hurriedly prepared code was presented for discussion.

Under the leadership of the Building Owners and Managers' Association, it was determined to appoint a Commission representing all interests, which would undertake the preparation of a new Elevator Code that would not only safeguard the public, but would be workable and practicable to the owners and operators of buildings. This Commission was duly organized and its first step was a request for the co-operation of the United States Bureau of Standards of the Department of Commerce in Washington.

Engineering representatives of the Bureau had for several years been actively at work in field surveys and special investigations for the purpose of producing a standard code covering the installation and operation of elevators. Representatives of the Bureau were members of a committee which prepared the standard elevator code completed and adopted last year by the American Society of Mechanical Engineers, and which was regarded as the last word from the most authoritative sources on this subject.

The activity of the National Government in this movement was prompted by the fact that as many people ride in a single year on passenger elevators in any large city as are carried by the local railways.

Statistics presented to this new Baltimore Elevator Code Commission showed that elevator casualties were infinitesimal compared with those incident to city railway transportation, the elevator hazard being in its nature considerably less and this mode of transportation permitting safeguards not practicable in railway transportation. Stimulus for the adoption of these elevator safeguards heretofore largely rested with the interest of the building owner in this subject and the exacting inspection and maintenance requirements of companies carrying elevator accident insurance. Local laws on this subject were so crude as to be of no practical value.

Contrary to the popular notion, the number of casualties resulting from falling elevator cars through the breaking of cables or other equipment was found to be negligible, being less than 6 per cent. of the total accidents. About 73 per cent. of the elevator casualties occur at the hoist-way doors, and modern practice in the installation of protective devices was eliminating accidents from this source.

The work of the United States Bureau of Standards was part of a general movement to make obligatory and enforce by standardized laws the protective features which the most modern elevator practice already put to rather general application. This would further minimize the possibilities of elevator accidents.

A fruitful source of elevator accidents was found to be the careless habits of users of elevators. In the new Baltimore Code some of the safety devices as well as the proposed regulations are designed to take care of these conditions. An intelligent conception by the public of what is done by the new Code for the safe handling of passengers on elevators is expected to materially assist in the effectiveness of these provisions.

Baltimore is unique in that it is the first city in the country to take advantage of the extensive work of the United States Bureau of Standards in this regard in combination with the work of the general elevator committee of the American Society of Mechanical Engineers and with the local city authorities and under the direction of the Baltimore Elevator Code commission, representing all interests directly concerned with the question of elevator safety. Dr. S. W. Stratton, director of the United States Bureau of Standards, took an active interest in the request from Baltimore and assigned to this city Mr. J. A. Dickinson, who was one of the engineering representatives of the Bureau on the general elevator code committee of the American Society of Mechanical Engineers.

The work in Baltimore started in September of 1921. The Commission in charge were the following: A. S. Goldsborough, chairman; P. O. Keilholtz, consulting engineer and technical adviser; Joseph E. Sperry, A. E. MacBride, W. J. Casey, C. Morgan Marshall, J. W. Rausch and Joshua G. Harvey. On the recent death of Mr. Keilholtz, occurring after the work had been well advanced, Mr. J. A. Dickinson, engineering representative of the United States Bureau of Standards, acted as technical adviser to the committee in addition to supervising a survey of Baltimore elevators and acting as general consultant to the Committee. Headquarters for the work of the Committee were provided by the Merchants and Manufacturers' Association of Baltimore in its general offices.

Acknowledgment is made by the Commission of the services rendered by Mr. Keilholtz. Among other contributions to the new code he prepared two of its most important features, viz: the creation of the inspection system and the requirements for testing safety devices. Both of these, the Committee feel, will afford the public protective features of the highest order, and regard this work of Mr. Keilholtz as another evidence of the civic spirit of this eminent Baltimore engineer. These details were finished by Mr. Keilholtz only a short time before his death.

The start of the work in Baltimore began with the survey of the local field. This included tests of the operation of elevators in the principal buildings of the city, under the direction of Mr. Dickinson, assisted by Mr. Henry C. Lewis, engineer of tests of the Gas & Electric Company, and Mr. J. F. Myrick of the General Electric Company. This survey also included tests of the effect on service of interlocking safety devices.

The commission adopted as its working basis the standard code prepared by the general elevator committee of the American Society of Mechanical Engineers. Additional safeguards suggested as a result of the survey made in local buildings; from developments in elevator equipment and from lessons of recent accidents in various cities, together with suggestions from practical elevator constructors, were adopted. Numerous sessions were held by the Commission, and were attended by well-known elevator engineers, representatives of the insurance companies concerned with the safe operation of elevators and by manufacturers of elevator equipment and safety devices.

The Commission kept in close co-operation with the city authorities, and Mayor Broening, who took an active personal interest in the work, held a number of conferences with the Commission in the Mayor's office, which were also attended by Building Inspector J. Frank Crowther, Chief Elevator Inspector Frank Huart, Chief Engineer Henry G. Perring and Assistant City Solicitor Horton S. Smith. Chief Elevator Inspector Huart also attended a number of the meetings of the

Commission to present the requirements sought by his department.

Another factor in the development of the new code was a committee of the Elevator Erectors' Association, composed of men daily engaged in the installation, repair and maintenance of elevators. This committee had been engaged in a careful study of the requirements for a new elevator code. Joint sessions were held between this body and the code committee, and the Elevator Erectors' Association gave a number of important suggestions dealing with the problems of safety that were incorporated in the new code. This committee was composed of E. R. Rhea, chairman; H. J. Holland, W. Lindenberg and Fred H. Hantsche.

Illustrating the wide sweep of the Commission in seeking sources directly concerned with elevator safety questions were conferences also held with representatives of the elevator inspection departments of companies engaged in carrying elevator accident insurance. Representatives of the companies attending these conferences were : J. R. MacDonald, J. D. Bullock, Elmer J. MacLeod, J. G. Barry, G. D. Bragdon, J. A. Colahan, John A. Corey, J. W. Rausch, Arthur Koppelman, W. R. Hamburg, Fred. F. Fox and W. C. Carroll.

The work of the Commission has been closely followed by the United States Bureau of Standards, and the new elevator code is regarded as the greatest single advance made in legislation of this character by any city in the country. With the standard code of the American Society of Mechanical Engineers as a basis, the two most important features incorporated in the new Baltimore code relate to the selection and approval of safety devices and the creation and control of the system of inspection. It has been recognized in this work that, however complete in its technical requirements the code may be, it still depends largely for its effective protection of the public upon the character of the periodic inspections and the reliability of safety devices that may be installed. On this account, the experts of the committee devoted considerable time to the development of these factors of the code.

The new code provides that no type of door lock, interlock or electric contact door-control device will be permitted unless it has been approved by the Inspector of Buildings on the basis of tests carried out by the United States Bureau of Standards to determine compliance with the requirements of this new code and with such specifications as shall be drawn up by the Bureau of Standards for this purpose. In this connection, it is interesting to note that in the hearing before the committee, representatives of several of the leading manufacturers of safety devices stated that, while the proposed tests were severe, they were prepared, in the interest of public safety, to re-design their devices if they did not successfully meet such tests.

Safety devices for elevators will be tested, before approval by the Bureau of Standards, under the adverse conditions which frequently cause such devices to fail when their successful operation is necessary to prevent accidents. Among these causes may be mentioned excessive moisture or dust in the atmosphere, neglect of lubrication and misalignment of door or elevator.

To satisfactorily make these tests require special laboratory equipment and skilled engineering supervision which would entail a heavy expense on any city attempting to perform this task alone. As the United States Bureau of Standards will make these tests for the whole country, it is in a position to supply the equipment and supervision necessary. Dr. Lyman J. Briggs will be in charge of these tests for the Bureau. Dr. Briggs is a well-known engineer and has been in charge of some of the most important tests made by the Bureau, particularly along aeronautical lines, having recently developed a practical aeroplane compass.

The inspection system created under the new code provides for examinations to determine the special fitness of applicants to handle this important work.

The Building Inspector is to select from the successful candidates in such examination all elevator inspectors for the City of Baltimore. Only inspectors qualified in this way will be permitted to make authorized inspections of elevators to comply with the requirements of this new code. Inspectors employed by casualty insurance companies, upon passing this examination, will be deputized by the Building Inspector to make authorized inspections. This avoids the expense of double inspection where liability insurance is carried.

The certificate of qualification issued to the elevator inspector is good for one year, and the Building Inspector may require a re-examination before issuing a new certificate. The object of this requirement is to keep the elevator inspectors abreast of the art, so that the public may be assured at all times of a thoroughly efficient inspection. The Building Inspectors Department is to issue a special form on which it will receive a copy of every authorized inspection, so that it may keep close watch upon the condition of all elevators.

Authority is given to the Building Inspector in the new code to shut down an elevator shown to be in a condition dangerous to life or limb by the inspector's report. All passenger elevators are to be inspected three times a year; power freight elevators, twice a year; hand car, freight, and dumb-waiters, once a year. The new code requires that a notice shall be posted in each elevator calling attention to this requirement and showing the date of the last inspection, with the name of the inspector signed thereto. This certificate will state that the elevator was found by the inspector to be mechanically safe. The object of these provisions is to enable persons using the elevator

to keep a check upon the compliance with the inspection requirement of the code.

Sky-larking in passenger elevators is made a misdemeanor by the new code. The new law recognizes that elevator operators have a serious task, and protects them from annoyance, prohibiting unnecessary conversation calculated to withdraw an operator's attention from duty. Flirtations with girl operators are put under ban, and any passenger violating elevator rules for public safety becomes subject to arrest.

To sustain the elevator inspection bureau in the Building Inspector's Department, in addition to the appropriation heretofore made for this purpose from the general budget of the city and from the revenue that this bureau will receive from inspections which its own inspectors will make, where there is no inspection by an authorized inspector of a casualty company, there is provided an annual license fee for each elevator of three dollars per year. This will insure the registration in the Building Inspector's Department of every elevator in the city, so that this Department can follow its periodic inspection and helps to make the Bureau self-supporting.

A fee of three dollars is charged for each inspection made by the Department, and where made by authorized inspectors in the employ of insurance companies such inspections are accepted as complying with the law, a fee of one dollar being charged by the Department in such instances for filing and recording.

The new code will require the installation within two years of either electro-mechanical or mechanical interlocking devices on hoist-way doors of all passenger elevators; either interlocks, contacts or automatic gates on all passenger elevators and electric contacts on all power-driven dumb-waiters having more than two landings. These requirements are to prevent the movement of the car while the landing door is open.

In addition to these requirements, hoist-way door openings for hydraulic elevators will be required to be provided with some form of door-closing mechanism to take care of possible "drifting" (the moving of the car away from a landing due to leaky valves), and the installation of a check valve on the high-pressure line to each hydraulic elevator machine to prevent the forcing back of water into the cylinder in case of overload on the car and to protect the occupants of a car in case of a failure on the high-pressure line.

The enclosure of all freight elevator platforms to a height of six feet, except on sides used for entrance and exit, is also provided for in the new code. Brakes electrically released will be required within two years on all electrically driven elevators. As an additional precaution, all passenger elevators will be required to have not less than two separate methods of automatically stopping the car in case of over-travel. It also provides

that all passenger cars shall be provided with a safety device placed under the car which will stop it in case of over-speed downward or breaking of cables. For all cars operating at a speed in excess of one hundred feet per minute, such safety devices shall be operated by a speed governor. The code also provides for car safety tests of all new installations.

Car gates will be required on elevators used in department stores, hotels or apartments, owing to the number of women and children ordinarily handled by such elevators, and will also be required for elevators used for express service in office buildings. All elevators having more than one entrance will be required to provide car gates which are in turn equipped with electric contacts to prevent the operation of the car until such gates are closed. This in addition to regular hoist-way door and locks.

The new code provides higher factors of safety for cables than has been heretofore required, and on existing installations when the cables are renewed they must comply with the factors of safety provided for in the code.

A marked improvement is looked for with regard to overhead and pit clearances in new installations when this code becomes effective. The code requires ample space to bring the car to a full stop by means of the automatic limit device before the car or counterweight strikes the bumper. This will not only provide greater safety for passenger, but will afford better facilities for inspection of the undercar safeties by inspectors. Suitable means of access to the pent house or elevator machines wherever located is required by the new code. Ease of access to such equipment insures better maintenance service as well as more thorough inspection.

In order that there will be no hardship to building owners, the code provides that where extensive changes or alterations are required, a reasonable period of time will be allowed to meet the provisions of this code, each paragraph being marked with a code number showing the time limit of compliance. Some of the requirements become effective immediately after the code becomes a law, others in from six months to two years. New installations must comply with all requirements before being allowed to go into service.

Baltimore, Md.,
June 16, 1922.



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